

# TALKS & FORUMS

Saturday 10:15 am – 11:10 am

## **SSB-129: An Introduction to Firefox Features and Customization, David McRitchie, Amateur Computer Group of New Jersey (ACGNJ)**

**Abstract:** Firefox can be used as a simple web browser or expanded by using or adding additional features. Keyboard shortcuts are available in all browsers that greatly facilitate usage. They are pretty much the same across most browsers. There is a lot more available in Firefox such as keyword shortcuts that can greatly expand the utility of Firefox. For example the location bar autocomplete (awesomeBar) combines searching, within your own web bookmarks and history, for strings within titles, urls, and tags together or separately. A lot of the real power of Firefox is in its extensions and other customizations. Blocking ads and pop-ups is just the start of what you can do.

**Bio:** David McRitchie runs the ACGNJ's Firefox SIG once a month. He also maintains a Firefox website at <http://www.mvps.org/dmccritchie/firefox/firefox.htm>.

## **SSB-102: IT and Ethics: Guidelines for Professionals, Robert Gezelter, Robert Gezelter Software Consultant**

**Abstract:** Computing traditionally has been about what could be done, not the ethics of doing something. The unprecedented adoption of Internet technologies worldwide has transitioned computing from an isolated technical activity with few ethical implications to a technology that often raises ethical questions. Clarity is important on all sides, users, implementers, and operators. Implementations such as Twitter, Google Buzz and Chatroulette are merely examples. Mundane examples such as remote systems management of desktops and portable devices also raise ethical questions. These are not merely philosophical questions; some of these decisions can have significant impacts and liabilities. This session will discuss the ethical issues that affect IT, from applications implementation to operations.

**Bio:** Robert Gezelter is a Senior Member of IEEE and an alumnus of the IEEE Computer Society's Distinguished Visitors Program. He holds BA and MS degrees in Computer Science from New York University, and is a Contributing Editor of the Computer Security Handbook, 5th Edition. He has spoken and written extensively on operating systems, networks, performance, security, tools, and similar areas. Robert Gezelter is in private practice and maintains his offices in Flushing, New York. He can be contacted via his firm's www site at <http://www.rlgsc.com>.

## **SSB-130: Getting Started With Microcomputers, the Internet, and Digital Photography, Herman Hinitz, H. Hinitz Photography**

**Abstract:** This session is designed for people who would like to use a personal computer for tasks such as word processing, electronic spreadsheets, graphics, internet portals (browsers), databases, antivirus programs, firewall programs, and digital photography, but are unfamiliar with how or where to begin. Associated with the talk will be an exhibit of photographs showing examples of the effects that can be obtained with digital cameras by utilizing appropriate computer programs. Some of these effects can also be achieved with the built in software present in many digital cameras.

**Bio:** Herman Hinitz has used diversified software and hardware in research, consulting, publications, and digital photography. Some of his work has been included in books and publications. He is a long time supporter of the Trenton Computer Festival.

## **SSB-103: Let's Make a Movie - Documenting TCF 2010, Session I, Douglas Ferguson, www.Videoerd.Com**

**Abstract:** This workshop will take 2 sessions. The first one in the morning will be a quick brainstorming and instruction session on our movie. Participants will capture moments around TCF 2010 in the form of videos, interviews, and photos. We will communicate during the day using Twitter. During the last session, we will gather to compile the footage and begin to organize our movie. Participants are encouraged to use any type of camera, but cameras where we can download footage in a compatible format are preferred - (flash or hard drive as opposed to tapes that need to be captured).

**Bio:** Doug Ferguson has presented at TCF since 2001 on a variety of topics ranging from software development to video editing. He enjoys video editing, web design, and assisting others with using technology. Doug is employed by EMC where he is a Senior Support Engineer for the Ionix IT operations software product.

## **SSB-131: Chumby Widget Development, John DeGood, Lockheed Martin Advanced Technology Laboratories**

**Abstract:** Chumby is much more than the ultimate alarm clock: it is an always-on window into your favorite parts of the Internet. Chumby is based on a small Linux-based color touchscreen computer with 454 MHz ARM processor, Wi-Fi, USB port, accelerometer, microphone, speaker, and FM radio

tuner. Chumby hardware and firmware are fully documented and hacking is encouraged. This presentation will provide a brief overview of Chumby and then demonstrate how to develop and upload your own widgets for Chumby using freeware tools.

**Bio:** John DeGood is a member of the engineering staff at the Lockheed Martin Advanced Technology Laboratories in Cherry Hill. He previously performed networking and computing research at Sarnoff Corporation and developed analytical instruments at Hewlett-Packard (now Agilent). John is active in the local chapters of ACM and the IEEE Computer Society. He is an extra class radio amateur (NU3E) and Secretary of the David Sarnoff Radio Club.

## **SSB-105: Patents, Trademarks and Copyrights 101, Anthony Carlis, Baker & Hostetler LLP**

**Abstract:** A 10,000 foot view of the costs and potential pitfalls of patents, trademarks and copyrights will be presented. We will try to answer the question "Now that I paid all this money for a patent, what do I do with it?"

**Bio:** Prior to attending law school, Anthony was a systems analyst for Unisys Corporation where he designed paperless office systems using Unix and Microsoft operating systems. Prior to Unisys, he also worked as a NASA contractor and devised an offline emulator for the Tracking and Data Relay Satellite System (TDRSS) communications satellite. He is a Microsoft Certified Systems Engineer and holds numerous Microsoft certifications, an amateur radio license and a pilot's license.

## **SSB-225: Controlling the World with PICs, Paul Bergsman, Author and Independent Consultant**

**Abstract:** Each year, Microchip Technology Inc. manufactures over half a billion embedded controllers, affectionately called PICs. The company has been very aggressive in adding features, and on-board modules, that greatly expand the PIC's usefulness. Microchip provides just about everything you need to work with PICs for free! Free Microchip support includes detailed data sheets and application notes, compilers and live technical support. And their \$50 in-circuit-programmer makes it cost effective for anyone to get started. This seminar is an introduction to working with PICs and has many example circuits.

**Bio:** Paul Bergsman has taught electronics in the Philadelphia Public Schools for 25 years. He chaired the PACS Engineering SIG for over 10 years, and is author of "Controlling the World with Your PC" which has been in print for more than 10 years! Paul has been an active supporter of TCF for many years. His interests include ham radio (N3PSO), international folk dancing, folk music, and chess.

## **SSB-228: Improving PC Performance for FREE, Michael Smith, Mike Tech Show/MHS Consulting**

**Abstract:** We will discuss how to improve your Windows XP/Vista/7 performance using free utilities. I will demonstrate step-by-step how to maximize your PC performance.

**Bio:** I am the host of the Mike Tech Show Podcast. My podcast is about all things technology and computer related. I discuss cool sites, software, and tips and tricks that will make you more productive at home and work. I am also an independent IT Consultant and IT Professional for over the past 25 years. I am a graduate of Drexel University and have been working with computers since the early days of the Texas Instruments' TI-99/4A home computer.

## **SSB-230: Why You Simply Must Time the Stock Market: A Method Using Artificial Neural Networks and Genetic Algorithms, Donn Fishbein, Neuroquant**

**Abstract:** Timing financial markets is essential in order to maintain a consistent rate of return. Buy and hold strategies work well only when the markets are headed north. Market downturns can be rapid and severe, and take years to recover from. This talk will first discuss why market timing is a viable strategy. Next will follow an introduction to artificial neural networks and genetic algorithms, and their application to technical analysis. A practical system for timing the markets using these tools will be introduced. Finally, methods to test and prove a trading system's validity will be discussed.

**Bio:** Donn S. Fishbein, MD, PhD, is a physician and scientist who has researched and traded the financial markets for 25 years. His particular area of interest is mathematical systems with biological roots. For the past ten years his focus has been on hybrid artificial neural network and genetic algorithm systems, both for end-of-day trading and more recently for daytrading systems. He has lectured on these subjects, describing profitable systems for trading equities, exchange traded funds, and index futures. He contributes trading signals to a neural net trading website, and offers consulting services and private development of trading systems based on these technologies.

Saturday 11:20 am – 12:15 pm

**SSB-129: Comparison of Satellite, DSL, Cable, FiOS, Fixed Wireless, T1, and Ethernet Options for Internet Access, Joe Budelis, Persimmon Telecommunications**

**Abstract:** Which of the many Internet access options are best? If telecom service is critical to an organization's mission, cost may not be the primary consideration. This presentation will review reliability, bandwidth consistency, and quality of DSL, Cable, FiOS, Satellite, T1, DS3, OC3, OCx, Fast Ethernet, GIG-E and varieties of Fixed Wireless connections. It will address such questions as: [1] Is cable really faster than DSL? [2] How does VoIP fare over different services? [3] Is FiOS a replacement for T1 service? Isn't it faster? [4] What is an Integrated T1? [5] What are EoC and EoD? Although some of the discussion, especially the first part, will be useful to an individual, the later parts of the presentation are mainly applicable only to organizations for which a telecom connection is critical to their mission.

**Bio:** Joe Budelis has performed IT or Business consulting with such diverse assignments as Senior Financial Analyst, SAS Data Analyst, Business Infrastructure Manager and Data Base Administrator. Currently, Joe assists businesses to find cost-effective telecommunications solutions; primarily consulting on, and selling, such services as T1, DS3, Ethernet, and OC3 voice and data, MPLS, SIP, VoIP phone service and conferencing services. For more information see his blog at <http://persimmontelecom.blogspot.com/>. Joe has a PhD from Harvard in Decision and Control.

**SSB-102: Open Source Systems Applications, Christopher Peckham, Henry Bros. Electronics**

**Abstract:** Henry Bros. Electronics has been deploying a wide variety of open source systems over the last two years. These systems touch every aspect of the business including sales lead tracking, time reporting, and asset management. Open source systems are also used for the company's internal portal and a client-facing reporting engine as well as some of the company's file servers, for the monitoring of the networks and services, and for backups and PBX services. This presentation will discuss how the company uses open source software in these areas, and plans to deploy more systems in the future.

**Bio:** Christopher Peckham has served in a variety of senior information technology, network engineering and operations positions during his 20-year career. He is presently the CIO/CSO of Henry Bros. Electronics, a provider of technology-based integrated electronic security systems, services and emergency preparedness consultation to commercial enterprises and government agencies. Christopher received his BS, MS, and PhD in Electrical Engineering from NJIT and an MBA from Rutgers University.

**SSB-130: Using Digital Cameras, Sumant Mehta, Washington Division of URS Corporation (retired)**

**Abstract:** This presentation will teach participants how to use digital cameras. The topics will include why digital cameras, using automatic mode, using scene mode, and using manual mode. The benefits of each will be covered and illustrated with numerous photographs. Navigating the camera menus and using the camera's operating manual will also be covered.

**Bio:** Sumant Mehta is a retired electrical engineer specializing in control systems and instrumentation. He extensively used various control hardware including programmable controllers, computers and networks. Photography is his hobby. His earliest recollection of taking photographs is from the mid 1940s. He has taught "Using Digital Cameras" and "Using Picasa to Organize and Edit Photographs" at RWJ-Hamilton Community Center for many years and at the East Windsor Senior Center since late 2007. He has bachelor's degrees in physics, mathematics, and electrical engineering, and a master's degree in Business Administration.

**SSB-103: The History and Science of 3D Photography and Present Day Applications, William Silverman, Brookdale Computer Users Group (BCUG)**

**Abstract:** This lecture/slide show presentation on 3D photography is composed of 4 modules – history, science, present day applications (e.g., 3D cameras, 3D cinema, and 3D TV), and how to create your own 3D.

**Bio:** William Silverman is a retired NYC high school chemistry and physics teacher with 34 years of teaching experience. He serves as a beta tester for ProShow by Photodex and for Digital Mediatronics. William is also a Master Gardener and member of the Deep Cut Orchid Society. Currently, he heads the BCUG graphics workshop group.

**SSB-131: The Future of Computers, Allen Katz, The College of New Jersey**

**Abstract:** The past is our portal to the future. This talk will discuss what 35 years of TCFs can tell us about the future of computers. Among the topics to be covered are: What will be the impact of smaller size and greater speed? Will computers learn to understand speech and *think* in ways similar to humans?

How will they affect communications, process control and prosthesis? Is teleportation possible? These and other topics will be considered with interaction from the audience welcomed.

**Bio:** Allen Katz is a professor of Electrical/Computer Engineering at The College of New Jersey. He is co-founder of the Trenton Computer Festival and has been festival director for more than 25 years. He has over 25 years of experience in the microwave, satellite and computer industries. He holds 17 patents and has written more than 80 technical publications. He is founder and President of Linearizer Technology, Inc. He has been a licensed Radio Amateur since 1956. He received the ARRL Technical Merit Award in 1976, the John Chambers Award in 1982, an IEEE Centennial Medal in 1984, the Martin Marietta Astro Inventor of the year award in 1993, and in 2002 the William Randolph Lovelace II Award for outstanding contributions to space science and technology. He was a MTT Distinguished Lecturer and is a Fellow of the IEEE.

**SSB-105: Best Websites, Search Engines, and Software 2010, Eva Kaplan, Computers + Kids Camp/Pennington Computer School**

**Abstract:** Always involved in uncovering phenomenal new websites, search engines, and software offerings, Eva is ready to wow TCF attendees with her 2010 recommendations. These new sites and software options are pretested, currently up and running, and meet her criteria. For those at her presentation, there'll be an extensive handout. As a plus, there'll be a segment on what's new in computer technology.

**Bio:** A speaker since TCF's inception in 1976, Eva Kaplan's Computers + Kids Summer Camp continues to receive accolades. Started in 1982, it offers exciting and enriching computer, engineering, and technology experiences to Princeton area youth. Eva initiated numerous computer courses for adults and children at MCCC. She's listed in Who's Who in Science and Engineering and in Who's Who in U.S. Executives. Eva has been a long time judge for the Elementary Division of The Mercer Science and Engineering Fair and has mentored student projects for Future City Philadelphia in conjunction with Engineers Week. See [evalkaplan@cs.com](mailto:evalkaplan@cs.com) for additional information.

**SSB-225: Home Automation Demonstration, Neil Cherry, Author/AT&T Research Lab**

**Abstract:** A demonstration and discussion of home automation technology (computer control) using a doll house. Included will be actual and simulated usage of common home automation tasks.

**Bio:** Neil Cherry is the author of Wiley's "Linux Smart Homes For Dummies." He has been working with computers, computer electronics, and software since 1978; has been playing with X10 since 1982; and began automating his home in 1992 when a friend gave him an X10 computer interface. Neil started the Linux Home Automation web site <http://www.linuxha.com> in 1996. When he is not riding his bicycle or playing with home automation, he works for AT&T Research Labs as a Test Engineer.

**SSB-228: Ubuntu Linux: The Basics, Install from Scratch, Mark Streitman, Evolutionary Thought, LLC**

**Abstract:** Want a state-of-the-art operating system for that old computer? Are you thrifty or just tired of paying Microsoft money for so-so operating systems? Do you like FREE things? Maybe you're just curious about Linux? This is the lecture for you! Learn how to take new or old hardware, a desktop, laptop, or netbook and get the free operating system of Ubuntu Linux on it. It doesn't matter that your computer was abandoned by Microsoft years ago. In this lecture we'll take old hardware and put a new operating system on it from scratch. Learn what Ubuntu is and how to use it to edit documents, surf the web, access your email, or play games. Since most people spend most of their computer time on-line, why pay extra for an operating system you don't need. Try Linux!

**Bio:** Mark Streitman has been an embedded systems engineer and programmer for over 25 years. He designs microcontroller based boards, does R&D and created the world's first Portable Foucault Pendulum. He is an outside Design Partner in association with Microchip. He has built several Home Theater PCs and loves to tinker around with Ubuntu Linux systems. He has also achieved an advanced level in Toastmasters and is President of the New Jersey Society for Amateur Scientists.

**SSB-230: Workshop on Designing your Website for Accessibility, Mike Barlow, ManTech Sensor Technologies Internat. (11:20 am to 1:20 pm)**

**Abstract:** Approximately 19% of Americans have at least one or more disabilities, including visual, hearing, physical, and mental which prevent them from achieving the full benefit of the Internet and many Web sites in particular. Even before signing into law the Section 508 Amendment of the Rehabilitation Act of 1973, which requires that federal organizations abide by specific accessibility guidelines for electronic and information technology, there has

been a determined effort for many other organizations to implement their web sites in a fashion that is more accessible to individuals with disabilities. The W3C has their own Web Accessibility Initiative (WAI), and many governments have regulations for making the web accessible. This workshop will show how developers can make their sites more accessible to users with various disabilities.

**Bio:** Mike has been involved in the computer industry since practically the start of personal computing and has been speaking at TCF for over 20 years. In recent years Mike has concentrated on more web-based applications as Web 2.0, including the use of AJAX and JSON, as well as application integration. Most recently, Mike has started working as a government contractor involved in certification, accreditation, and web application accessibility.

#### Saturday 12:25 pm – 1:20 pm

##### **SSB-129: Disposable Virtual Machines, Robert Gezelter**

**Abstract:** Virtualization is not merely for businesses trying to wrench the last iota of efficiency from their infrastructure. Virtual machines can also be used to enhance home computing security. In many households, there is rightly concern about security, particularly when a computer is shared by several members of the family. Friends and visitors complicate the problem. Knoppix and similar LiveCD Linux systems are one solution; but they have limitations. Disposable virtual machines are a similar solution, one that provides a full Windows environment, even as Administrator, without compromising the integrity of the underlying hardware. With disposable virtual machines, one can browse a suspect www site without endangering one's electronic banking. This session will demonstrate how disposable virtual machines can be used in a home setting.

**Bio:** See Saturday 10:15 am

##### **SSB-102: Introduction to Agile Methods - Fact or Fiction?, Matthew Ganis, IBM/Pace University**

**Abstract:** Agile software development methods have been proposed as a way to accelerate an organization's speed to market while increasing their stakeholder satisfaction with the finished product. By forming development teams that work in close collaboration with a stakeholder, teams have produced products that not only meet and exceed expectations, but do so in a way that tends to introduce less error prone code. In this session I will introduce agile and iterative methods, and examine the various practices used in their execution. Real world implementations will be presented and I will attempt to dispel the various rumors and urban legends that tend to plague the would-be adopters of these new methods.

**Bio:** Matthew Ganis is a Senior Technical Staff Member (and Certified Scrum master) at IBM. He is the IBM Community of Practice leader for Agile@IBM, helping to change the way software is created within IBM. Matthew is a member of the steering committee for New York City's chapter of the Agile Project Leadership Network (APLN) and serves on the editorial board of the *International Journal of Agile and Extreme Software Development*. He has authored a number of papers and books on his experiences with Agile methods, including the recently released *Practical Guide to Distributed Scrum* published by IBM Press.

##### **SSB-130: All You Ever Wanted to Know About HDTV, Cass Lewart, Freelance writer**

**Abstract:** HDTV is a technological marvel, but is also a consumer electronic product about which the public has little understanding of its optimal use and features. Cass Lewart will address the following topics: [1] The advantages and drawbacks of the three principal HDTV displays – LCD, Plasma and Projection [2] Digital frequency allocation and modulation schemes – What do they mean to you? [3] What do numbers like 720p or 1080i mean? [4] How to hook up the HDTV to other A/V components [5] Compare free over the air, cable and satellite reception [6] Are the broadcasters cheating the public? [7] How to record digital signals to DVD, hard drive and tape [8] Using HDTV as a large monitor for your computer and using your computer as an HDTV receiver and video recorder.

**Bio:** Cass Lewart is an electrical engineer and a long time computer hobbyist. He is the author of 10 books and numerous articles relating to personal computers, hobby electronics, database programming and data communication. His most recent book, *The Ultimate Modem Handbook*, is published by Simon and Schuster. He is also a recipient of the ACGNJ Computer Hobbyist of the Year award.

##### **SSB-103: Enhance Your Digital Photos Open Source Software, John LeMasney, John LeMasney Consulting**

**Abstract:** This session will introduce and demonstrate five useful, free technologies that you can use to manipulate, improve, clean, brighten, clarify

and positively enhance your digital photography. Participants are encouraged to bring a laptop with Windows, Mac or Linux so that they can start playing right away. Digital photography enthusiasts, novices, and professionals are all welcome to attend and add to the discussion.

**Bio:** John LeMasney is a father, husband, artist, designer, speaker, consultant, technologist, manager, writer, poet, photographer, sculptor, and open source evangelist living and working in central New Jersey

##### **SSB-131: Video Games – 2010, Roger Amidon, DX Computer Company**

**Abstract:** New and more realistic video games are becoming the standard as techniques improve. We will discuss and demonstrate the latest state of the art video games being produced today for current game console hardware.

**Bio:** Roger was involved with programming video games from 1989 through 2004. He still enjoys playing video games, and so do his sons. They will help with the demonstrations and share their experiences growing up with their dad who was involved in that industry.

##### **SSB-105: Linux Kids – Emerging Trends in Children's Technology, Michael Gualtieri, Kiddix Computing, Inc.**

**Abstract:** Kids are not the first thing that jumps into your mind when discussing Linux, but an emerging wave of mobile technology could put Linux into more children's hands than ever. "Linux Kids: Emerging Trends in Children's Technology" will discuss how Linux and Open Source Software can play a role in the next generation of children's technology. In addition, current operating systems, applications, and utilities that can help everyday families and K-12 education will be addressed.

**Bio:** Michael Gualtieri is the founder and CEO of the Pittsburgh-area software startup Kiddix Computing. He first attended TCF as a child with his father over 20 years ago, and now focuses his career on the development of safe and engaging computer environments for children. Mr. Gualtieri has nearly twelve years of experience working with Linux and Open Source Software in both technology and business roles.

##### **SSB-225: Electric Vehicle Customizing, Robert Korn, Pratt Institute**

**Abstract:** Part of the Pisces Electric Vehicle program at Pratt Institute is to develop the support infrastructure for our EVs. This includes charging stations that charge back to the campus card system and intelligent dashboard displays. During the presentation we will show operational prototypes of the charging station and digital dash options we have created. The dash options can be applied to any vehicle from a bicycle to SUV's. Handouts, circuit diagrams and code will be available for all open source projects.

**Bio:** Robert Korn is the Assistant Director of Student Information Systems at Pratt Institute and proprietor of Open Valley Consulting Corporation. He is a major proponent of Open Source and wrote his first programs on a Unix system over 33 years ago.

##### **SSB-228: Using Open-Source Software to Reduce IT Costs, Art Taylor and Michael Colonel, Rider University**

**Abstract:** With increasing budget pressures, reducing costs has become increasingly important. Open source software provides access to quality software without the expensive licensing fees of proprietary software. Businesses have been hesitant to change or eliminate long standing licensing agreements. This talk will examine the open source landscape, providing details on how open source provides a safe, effective, and economical alternative to using traditional proprietary software. This presentation will provide examples of business, government, and other organizations who have successfully converted some or all of their IT operations to open source software.

**Bio:** Art Taylor is a professor in the Computer Information Systems Department at Rider University. He worked for over 17 years in various roles in the IT industry. He has a PhD from Rutgers, and a Masters in Information Systems from George Mason University. Michael Colonel is a senior Accounting Major at Rider University. He is in the Business Honors Program, officer of the Rider Technology Club and the Rider Accounting Society. He will be employed by Ernst and Young upon graduation from Rider.

#### Saturday 1:30 pm – 2:25 pm

##### **SSB-129: A Brief Tour of Windows 7 and Office 2010, David Soll, Omicron Consulting**

**Abstract:** David Soll will present a brief tour of Microsoft's latest desktop operating system, Windows 7, as well as the soon to be released version of Office, Office 2010. Both Windows 7 and Office 2010 have many exciting new features. These features will be highlighted as well as demonstrated. This talk is designed to be highly interactive, inviting questions and comments from the audience.

**Bio:** David Soll is the Vice President and the Chief Technology Officer for Omicron Consulting in Philadelphia. He is also the Chairman of the Princeton Chapter of the IEEE Computer Society as well as the Chairman of the TCF Professional IT Conference. David has been working with computer technologies for over 25 years and holds a BS in Electrical Engineering from Drexel University. He has worked in computer programming, network engineering, systems analysis, and system architecture and design, and is still active in the most technical aspects of computing.

**SSB-102: Internet Job\$\$\$, Donald Hsu, Dominican College**

**Abstract:** Twitter, Internet III, the war is over and stock is way up. Yes, the economy is coming back, but in a jobless recovery. Retirees cannot wait to get back to work. Golfing and fishing are boring. Eighty percent of people have jobs from Internet. Accounting needs 2.1 million by 2016 (Sarbanes Oxley, forensics, QuickBooks, PeachTree, MS Dynamics, small business accounting); application developers (C++, Java, C#) - thousands of jobs, but no applicants; database (MySQL, MS Sql server, Oracle 11g, SAP, Sybase, Data Warehouse), starting at \$80,000; networking (Cisco, Info Security, A+, Network+); systems (Unix, Linux, Vista, Window 7); business intelligence (Project Manager, Global Finance, sales/marketing of tech product/service). Computer majors are down 50 to 80% in US universities. This means more jobs for you and me. Bring a resume and get a free critique from the speaker.

**Bio:** Donald Hsu is a professor at Dominican College and President of the Chinese American Scholars Association. He has taught 70 subjects from Accounting to Unix, and worked for 31 firms with 8800+ clients/students. Recently one student got a job at Microsoft Corporation, one got a job with AT&T and one got an IT job with the Obama Administration!

**SSB-130: BlackBerry Smartphone Application Development, John DeGood, Lockheed Martin Advanced Technology Laboratories**

**Abstract:** This presentation will provide an overview of BlackBerry mobile application development and deployment alternatives. The talk will focus on developing mobile applications in Java, which allows you to create diverse, feature-rich applications like games and corporate applications. You can choose to develop using either the Eclipse environment or the BlackBerry Java Development Environment. During the presentation a complete Java application will be developed, run on a BlackBerry simulator, and then installed over-the-air and run on a BlackBerry Smartphone.

**Bio:** See Saturday 10:15 am

**SSB-103: Hollywood Digital Effects on an Indie Budget, Orlando Rivera, www.TimeView.TV**

**Abstract:** The focus of this presentation is how to create Hollywood style VFX on an indie budget (or just have fun at home). We will cover the tools and techniques (computes, software, digital cameras) being used, and how this all gets done (from green screen to 3D animations). Also included will be the new RED and other HD cameras, and related topics as stream Flash videos for trailers and shorts for showing off your work.

**Bio:** Orlando Rivera was a visual effects supervisor for a feature film, <http://www.aathemovie.com>, and has experience in new media, development and content creations. Clients include AT&T Labs in VOD and live streaming, QVC.com, E&Y, and Sony/BMG. He also teaches digital filmmaking. His IMDb link is <http://www.imdb.com/name/nm2848791/> and his web site is [www.timeview.tv](http://www.timeview.tv).

**SSB-131: Secure VoIP and Replacing Skype with Free Software, David Sugar, GNU Telephony**

**Abstract:** David Sugar will be talking about how he and others have developed solutions to enable people, private organizations, even national governments, to communicate securely even over the public Internet using the GNU ZRTP stack within the GNU Project, and for all computing platforms. Furthermore, this work is being integrated with GNU SIP Witch, a new kind of desktop VoIP integration service enabling both privacy and freedom from central providers. It is a purely free software solution to proprietary protocols implemented in source-secret and hence potentially insecure libraries and central control points that put privacy in jeopardy, such as in Skype.

**Bio:** David Sugar is the former CTO of Open Source Telecom Corporation and an active maintainer for a number of packages that are part of the GNU project. He has served as the voluntary chairman of the FSF's DotGNU steering committee, <http://www.dotgnu.org>, and the community's elected representative to the International Softswitch Consortium.

**SSB-105: CyberSecurity for the Home User, Joe Cupano, Orange County Amateur Radio Club**

**Abstract:** This session provides information on cybersecurity for the home presented in plain language using low cost tools. Session topics will include: Brief history of computer mischief and how did it get so bad, You know more than you think, Protecting your Computer and home network, Managing your Online Identity, What you type may haunt you, and Emerging threats to the Home User.

**Bio:** Joe Cupano has been an Information Security professional for fifteen years working in the Global 100 and federal marketplaces as well as a published author and speaker. Joe holds an amateur radio license (NE2Z) and is currently the Vice President of the Orange County Amateur Radio Club in Orange County, New York.

**SSB-225: Building Mobile Apps for 4G Systems, Thaddeus Kobylarz, Cellular Applications Consultant**

**Abstract:** This tutorial concerns building applications for mobile devices (cellular terminals) by a new software approach. The method and tools are intended to be used for 4G cellular communications. These applications, termed Compound Wireless Services (CWSs), derive their name from ordinary grammar, which corresponds to how the applications are built. A simple sentence consists of a single assertion, e.g., "It looks like it will rain." The use of connectives, such as "and," "or," allow the linking of assertions to form compound sentences, e.g., "It looks like it will rain and I will take my umbrella." Analogously, a CWS is formed by linking services with connectives. Fundamental Wireless Services (FWS) correspond to single assertions, e.g., "telephone number." The FWS are line coded services. All CWSs are built graphically. CWS is protected by US Patent 7424292B2.

**Bio:** Initially, Kobylarz's professional years were spent in academia (assistant professor at Princeton, associate professor at Stevens, and Department Chairman at the University of Petroleum and Minerals). In his later employment and until retirement, he worked at Bell Laboratories. Afterwards, he was a Bell Laboratories representative to wireless telecommunications standards committees such as the International Telecommunications Union (ITU-T) and the Telecommunications Industry Association (TIA). He received his PhD in Electrical Engineering from NCSU.

**SSB-228: Introduction to C++, Michael Redlich, Amateur Computer Group of New Jersey (ACGNJ)**

**Abstract:** This seminar is an introduction to the C++ programming language. C++ is an object-oriented programming (OOP) language created by Bjarne Stroustrup at AT&T Labs. Since knowledge of OOP is vital in the development of robust applications, the OOP paradigm will be introduced. Advantages of OOP over structured programming and the four attributes of OOP (data encapsulation, data abstraction, inheritance, and polymorphism) will be discussed as well. Some C++ keywords will be reviewed before introducing the C++ class mechanism. A small, working C++ example will be reviewed to demonstrate how the attributes of OOP are utilized within C++ classes. [Prerequisite: working knowledge of a structured programming language such as C, FORTRAN, or Pascal].

**Bio:** [Michael Redlich](#) is a Senior Research Technician at a petrochemical research organization in New Jersey with experience in developing custom web and scientific laboratory applications. He currently serves on the ACGNJ Board of Directors as Past-President and has facilitated the monthly ACGNJ Java Users Group since 2001. Mike's technical experience includes object-oriented design and analysis, relational database design and development, computer security, C/C++, Java, and other programming/scripting languages. He has conducted seminars at [TCF](#) since 1998 and has co-authored [articles](#) with Barry Burd for [Java Boutique](#). Mike has a BS in Computer Science from [Rutgers University](#).

**SSB-230: Introduction to the Vintage Computing Hobby, Evan Koblentz, Mid-Atlantic Retro Computing Hobbyists (MARCH)**

**Abstract:** This lecture will explain the landscape of the vintage computing hobby, how to get involved and resources for finding information. "Vintage" for our hobby generally means anything from the mid-1940s to mid-1980s. People collect everything -- micros, portables, homebrews, minis, even mainframes! And don't forget the software, manuals, books, t-shirts and accessories. But unlike collecting art, furniture or stamps, vintage computers need to be restored and used, or else their circuits become bad -- or at least decrepit. Come to this lecture to learn all about the hobby and how you can get involved.

**Bio:** Evan Koblentz is a computer historian and an officer of MARCH, which is a non-profit user group for collectors and restorers of vintage computers.

Saturday 2:35 pm – 3:30 pm

**BSC 202: Free Software, Free Society, Richard Stallman, Open Source Activist** – see Keynote speaker page 2.

**Saturday 3:40 pm – 4:35 pm**

**SSB-129: Project Management, Donald Hsu**

**Abstract:** Dice.com lists 3,150 project related openings daily! Project managers cut across major functional areas (accounting, human resources, marketing, and operation). They get jobs in construction, education, finance, healthcare, government, information technology, and manufacturing, just to name a few. Anyone can get into this profession. Salary level starts about \$85,000 with or without PMI certification! Topics to be covered in this talk are: CPM, GANTT, PERT, SOW, WBS, budget variances, condition of satisfaction, effective business communication, planning strategy, project overview statement, project team members, scope creep, the use of MS Project software, import/export files to Excel, and creating a master plan on the project server. Speaker will demonstrate real-life projects. Bring a friend to learn more!

**Bio:** See Saturday 1:30 pm

**SSB-102: Career Planning for Technical Professionals, Ernest Schirmer, Acentech, Inc.**

**Abstract:** We know we will experience change during our careers, but the rate of change makes a big difference. Some would describe the rapid changes taking place in industry as exciting and challenging while at the same time, others are concerned their jobs will be eliminated tomorrow. This presentation will give an overview of career planning, job search strategies, how new technologies may affect your career, were to get salary surveys, and how to stay current.

**Bio:** Ernest Schirmer is Director of Technology Consulting for Acentech, Inc. and the Managing Director of Acentech's Trevese, PA office. He earned his MBA in Information Systems from Binghamton University and holds degrees in economics, business administration and electrical engineering technology. Ernest is a member of the IEEE, Vice President of Education for the Association of Information Technologies, a frequent speaker at industry functions, and author of numerous articles for trade publications.

**SSB-130: Celluloid to DVD, David Ciotti, The College of New Jersey**

**Abstract:** David Ciotti will review the various technologies for converting film to DVD with particular emphasis on converting 8 mm and Super 8 mm film to DVD using a TeleCine converter.

**Bio:** David Ciotti manages the electronics laboratory and provides electronics support for the School of Engineering at The College of New Jersey. He has been the Macintosh Technical support for Mercer County Community College and has taught Troubleshooting and Maintaining your Macintosh for CompuMaster.

**SSB-103: Let's Make a Movie - Documenting TCF 2010, Session II, Doug Ferguson**

See Saturday 10:15 am for Abstract and Bio

**SSB-131: Hacking Your HTC Phone with Customized Windows Mobile and Google Android, James Mikusi, Web-Kong.com**

**Abstract:** Many realize the modern Smart Phone is really just a pocket sized computer; thus one may wonder why it can't be manipulated and customized just as a desktop computer. Well, IT CAN. Just as one may load Linux, Windows, or any other Operating System on their desktop computer, and maybe even dual-boot between them, the same can be done with an HTC mobile phone. Learn what a ROM is and how to load one on to your phone. Also learn how to load Google Android in a dual boot configuration. The HTC Herald (aka T-Mobile Wing) and the HTC Wizard (aka T-Mobile MDA) will be used for demonstrations.

**Bio:** I am the owner/operator of Web-Kong.com, an Information Architecture and IT consulting resource for small businesses. We focus on productivity and efficiency-oriented solutions to maximize the benefit from the IT infrastructure. While we offer full spectrum solutions, we are GNU/Linux advocates and solution providers.

**SSB-105: Fraud Detection, Chamont Wang, The College of New Jersey**

**Abstract:** In this talk we will discuss the use of tools for crime analysis and fraud detection. The tools were developed by Visual Analytics, Coplink, SAS, SPSS and others. The techniques make use of new technologies in the fields of Data Mining, Text Mining, Geographic Information Systems (GIS), Face Recognition, and Video Surveillance. A special emphasis of the talk will be on Analyst's Notebook, which was developed by i2, a British software company. The i2 technology has been used by more than 4,500 organizations worldwide,

including the FBI, IRS, insurance companies, and business firms. It is now used in almost all major FBI investigations and by people in the White House. A hands-on session is available for those who want to experience the wonder and the thrill of this new technology.

**Bio:** Chamont Wang is a professor in the Department of Mathematics and Statistics at The College of New Jersey. He is an Associate Editor of the research journal, CSBIGS (Case Studies in Business, Industry and Government Statistics), and serves as an expert witness of the Round Table Group expert consortium, a premier expert witness referral firm. He is author of journal papers in the fields of Chaos and Dynamical Systems, Data Mining, and Statistics. Recent journal publications: "Data Mining for Large Datasets and Hotspot Detection in an Urban Development Project," 2008, "An Analysis of Profit and Customer Satisfaction in Consumer Finance," 2009; two book chapters in Handbook of Statistical Analysis and Data Mining Applications (Publisher: Academic Press/Elsevier), 2009; and a forthcoming article in the 2010 Springer-Verlag Encyclopedia of Statistical Science.

**SSB-225: Science and History Resources of Central New Jersey, Frank O'Brien, Infoage Science/History Learning Center**

**Abstract:** The museums found in major cities are known for their collections of unique and historic artifacts. From this impression, it is easy to overlook smaller, more specialized museums and collections that are equally exceptional. Often hidden in plain sight and only a short drive away, they are a perfect solution for rainy days or school trips. Imagine seeing artifacts that went to the moon, the beginnings of color television or learning about "the crime of the century"! Attendees will be introduced to 6-8 small museums and collections that are within an hour's drive of TCF.

**Bio:** Frank O'Brien is an author and space historian, and often lectures on spaceflight and computer architecture. He has volunteered and created exhibits for the Cradle of Aviation in Long Island, NY, and the Infoage Science and History Learning Center in Wall, NJ.

**SSB-228: C++ Advanced Features, Michael Redlich**

**Abstract:** This in-depth seminar will cover some of the advanced features of C++. Four main topics will be presented: overloaded operators, templates, exception handling, and namespaces. Each of these topics will be individually discussed and a sample code will be reviewed to demonstrate how each feature is implemented. There will also be a brief introduction to the Standard Template Library. [Prerequisite: working knowledge of fundamental C++].

**Bio:** See Saturday 1:30 pm

**SSB-230: History of Computing in New Jersey and Pennsylvania, Evan Koblentz and Bill Degnan, Mid-Atlantic Retro Computing Hobbyists**

**Abstract:** This lecture will explain important moments in the history of the computer industry that developed in New Jersey and Pennsylvania. Photographs will be shown and important artifacts displayed.

**Bio:** See Saturday 1:30 pm

**Sunday 10:15 am – 11:10 am**

**SSB-129: Why You Simply Must Time the Stock Market: A Method Using Artificial Neural Networks and Genetic Algorithms, Donn Fishbein**

See Saturday 10:15 am for Abstract and Bio

**SBB-102: Controlling the World with PICs, Paul Bergsman**

See Saturday 10:15 am for Abstract and Bio

**SSB-130: Open Source Systems Applications, Christopher Peckham**

See Saturday 11:20 am for Abstract and Bio

**SSB-103: iWork '09 – Impressive Documents, Spreadsheets, and Presentations, Dave Marra, Apple, Inc.**

**Abstract:** Discover how easy and fun word processing, spreadsheets and presentations can be with iWork '09. The new iWork '09 productivity suite features major updates to Pages, Numbers and Keynote, and all are compatible with Microsoft Office. Also discover iWork.com, a new public beta, web-based service from Apple that lets you share your iWork '09 documents, spreadsheets, and presentations with Macs and PCs in a way that's both simple and smart.

**Bio:** As a Senior Systems Engineer for Apple, Dave Marra has conducted thousands of technology presentations, keynote addresses and workshops for schools, Mac and PC user groups, businesses and other professional organizations across the United States and Canada. Certified as both an Apple Certified Technical Coordinator and an Apple Certified Systems Administrator, his specialty areas include digital multimedia, internet technologies, accessibility

and Mac/PC integration. For more information about Dave, please visit his web site at [www.marrathon.com](http://www.marrathon.com).

**SSB-131: Hot Job - C#.NET Programmer!, Donald Hsu**

**Abstract:** With outsourcing and downsizing, you may think that there are no programming jobs, but in fact the opposite is true! From financial computing, web design, iPhone apps to gaming, Java has been the programming language of choice. Four million Java programmers did applications for cell phones, PDAs, web servers and databases. Since 2004, C# (C sharp) is quickly gaining momentum as a preferred language. Dice.com lists 1857 jobs for Java and 843 jobs for C# (up from 520 last year)! Salary ranges from \$75,000 to \$120,000. C# .NET programming will be discussed and “hands-on” exercises demonstrated. Show up and learn!

**Bio:** See Saturday 1:30 pm

**SSB-223: A Brief History of the International Telegraph Code, Robert Buus (W2OD), Bell Labs (retired)**

**Abstract:** The Morse Code was invented by Alfred Vail, Morse’s assistant, in 1838. This talk traces the evolution of the original American Morse code to the present International Telegraph Code still used by radio amateurs to this day.

**Bio:** First licensed in 1953 and Extra Class since 1955, Bob Buus now holds the amateur call W2OD. He obtained his First Class Radiotelephone and Second Class Radiotelegraph licenses in 1954 and went onto college earning a BSEE from the University of North Dakota in 1959 followed by an MEE from New York University in 1961. He was employed at Bell Labs until 1989 when he retired to devote more time to amateur radio.

**SSB-225: Getting Started in VHF and VHF Contesting, Rick Rosen (K1DS) and Michael Davis (KB1JEY), “PACKRATS” Mt Airy VHF Radio Club**

**Abstract:** This instructional workshop, with co-presenter Mike Davis, KB1JEY, will outline the basics of VHF communication and propagation, available and affordable equipment and antennas and station assembly. It is designed to encourage VHF communication on bands 50 MHz and above that are more than repeater communications. We will review commercial transceivers, transverters, amplifiers and receive preamplifiers as well as coax and connectors. There will also be an introduction to VHF contesting.

**Bio:** Rick, K1DS, has been hamming for 50 years and has participated in all phases of hamming from crystal controlled novice CW to microwave and moonbounce. He was the president of the Packrats for the past 5 years and has written multiple articles on VHF contests for QST. Michael, KB1JEY, is in the process of building a substantial VHF operation from his QTH and is ready to pass along much of the knowledge he has gained as a relative newcomer to VHF. Both are active members of the Mt Airy VHF Radio Club – “PACKRATS.”

**SSB-226: From Zone 2, Canada This is VE2DXY – A Ham Radio Contest DXpedition, Andy Vavra (KD3RF/VE2DXY) and Irwin Darack (KD3TB), Frankford Radio Club**

**Abstract:** Since 2002 the VE2DXY contesting team has conducted a mini-DXpedition to northern Canada to activate Zone 2 for CQWW SSB. In over 8 years of operation, we have put this rare zone in the logs of thousands of hams eager to make contact during the contest or for their WAZ certificate. We track the performance of our station each year and have made continuous improvements to increase our competitiveness. Learn more about contesting and DXpeditioning from our informative and entertaining presentation.

**Bio:** Avid contesters and DXers, Andy Vavra, KD3RF / VE2DXY and Irwin Darack, KD3TB, are both amateur Extra Class licenses; have operated from Zone 2 in Canada, VE2DXY; and held calls and operated from Singapore, 9V1AP, East Malaysia, 9M6TBT, Antigua, V26TB and Costa Rica, TI5/KD3TB. They can be reached at KD3RF@arrl.net and KD3TB@arrl.net respectively, or via their QRZ.com call book addresses.

**Sunday 11:20 am – 12:15 pm**

**SSB-129: Comparison of Satellite, DSL, Cable, FiOS, Fixed Wireless, T1, and Ethernet Options for Internet Access, Joe Budelis**  
See Saturday 11:20 am for Abstract and Bio

**SSB-102: iPhone Apps Development, Bryan Mayer and Chris Hallberg, The College of New Jersey**

**Abstract:** Smart phones are becoming more and more common, one of the most notable being the iPhone. Apple’s App Store allows iPhone developers to sell/distribute applications they have written. This talk will provide an overview of iPhone application development, touching on key points of their design and creation. It will focus on two things, technical aspects, and commercial aspects.

These include familiarization with the SDK (Xcode), basics of Objective-C (iPhone programming language), and the interface builder, as well as improving aesthetics, getting into the app store, and getting Apple’s approval.

**Bio:** Bryan Mayer is a senior majoring in Computer Science at The College of New Jersey. He is an iPhone enthusiast, and is particularly interested in how they change the way we view security. Chris Hallberg will be a co-presenter. He is a junior at The College of New Jersey, and is double-majoring in both Computer Science and Interactive Multimedia. He also shares an affinity for smart phone development. Bryan and Chris are currently bringing their skills together to design/build a video game for the iPhone as part of their academic study.

**SSB-130: Hands-On Java Programming Workshop, Michael Redlich**

**Abstract:** This new hands-on workshop will provide an introduction to the Java programming language plus review some intermediate concepts. Some Java keywords will be reviewed before introducing the Java class mechanism. You will have the opportunity to build a small, working Java application to demonstrate how the attributes of OOP are utilized. You will then build upon your application as each of the intermediate features (JavaBeans, exception handling, Java Generics, and Java Database Connectivity (JDBC)) is reviewed. If time allows, there will also be a brief introduction to the Java 2 Collections. [Prerequisite: working knowledge of a structured programming language such as C, FORTRAN, or Pascal].

**Bio:** See Saturday 1:30 pm

**SSB-103: Introducing Mac OS X v.10.6 Snow Leopard!, Dave Marra**

**Abstract:** The upgrade to Apple’s most successful operating system ever, Snow Leopard builds upon a decade of Mac OS X innovation with hundreds of refinements, new core technologies and out-of-the-box support for Microsoft Exchange, all engineered upon a rock-solid, 64-bit UNIX foundation. Snow Leopard features a more responsive Finder; significantly faster built-in applications; a Dock with Exposé integration; Safari 4, the world’s fastest web browser; QuickTime X, to easily view, record, trim and share video; and much, much more! Discover Mac OS X v.10.6 Snow Leopard today – the world’s most advanced operating system, finely tuned.

**Bio:** See Sunday 10:15 am

**SSB-131: Cloud Computing – A Fad or the Future?, Manoj Pooleery, Columbia University**

**Abstract:** Technology has progressed so far that having superior hardware is no longer a differentiator for businesses. In this more or less level playing field, can the *Cloud* help you provide your service or product faster and cheaper? Or is it going to be another passing fad like many of its predecessors? In this talk we will discuss the concepts that constitute a Cloud Computing framework as services: Infrastructure (IaaS), Platform (PaaS) and Software (SaaS); relate Cloud Computing to its predecessors; and discuss probabilities for its longevity.

**Bio:** Manoj Pooleery is an IT professional with over 15 years of experience. Currently, he is working at the Center for Computational Learning Systems at Columbia University as a Program Manager.

**SSB-223: ARRL Forum, Bill Edgar (N3LLR), Moderator**

**Abstract:** Join ARRL Atlantic Division Director Bill Edgar and other League officials for a briefing and question/answer session on the recent activities and programs of the American Radio Relay League (ARRL), the National Association for Amateur Radio in the United States.

**Bio:** First licensed in 1992 and Extra Class since 2000, Bill Edgar now holds the amateur call N3LLR. He served as the District Emergency Coordinator from 1993 to 1994, the Western Pennsylvania Section Emergency Coordinator from 1994 to 1996, the Western Pennsylvania Section Manager from 1996 to 2000 and the Vice Director of the Atlantic Division of the ARRL from 2000 to 2006. He was elected to his current position in 2006. He has been an ARRL Volunteer Examiner since 2000.

**SSB-226: Emergency Communications and EMP, Robert Schroeder (N2HX), New Jersey Office of Emergency Management**

**Abstract:** Robert Schroeder’s presentation will consist of an overview on the NJ Office of Emergency Management’s approach to emergency communications and highlight the importance of surge and EMP protection. EMP refers to the electromagnetic pulse produced by the detonation of a nuclear device. Reference will be made to his award winning EMP article, which appeared in the November 2009 issue of QST.

**Bio:** Robert Schroeder is a graduate of TCNJ and holds a degree in electrical engineering. He is currently the communications and warning officer for the New Jersey Office of Emergency Management. Prior to that, he worked for New Jersey Public Television as a broadcast engineer. He holds memberships

in the IEEE, the Society of Broadcast Engineers, and the Society for Technical Communication. He is the author of several technical articles, book reviews, and writes a monthly column related to Amateur Radio entitled Balanced Lines. He holds an Extra Class Amateur Radio license (N2HX) and is currently the repeater director for the Delaware Valley Radio Association, Inc.

**Sunday 12:25 pm – 1:20 pm**

**SSB-129: Develop Your Own Mobile Phone Apps, Barry Burd, Drew University**

**Abstract:** A cell phone is a small computer. And like any other computer, a cell phone runs programs. This talk will discuss how to write programs for your own phone, whether it's an iPhone, a BlackBerry, an Android, a Windows Mobile unit, or a pay-as-you-go *cheapo* phone. You can even create apps for other people to use. This session shows you how to get started.

**Bio:** Barry Burd received an M.S. degree in Computer Science at Rutgers University and a PhD in Mathematics at the University of Illinois. Since 1980, Barry has been a professor in the Department of Mathematics and Computer Science at Drew University in Madison, New Jersey. He is the author of several articles and books, including *Java For Dummies* from Wiley Publishing, Inc.

**SSB-102: Enhance Your Digital Photos Open Source Software, John LeMasney**

See Saturday 12:25 pm for Abstract and Bio

**SSB-130: Introduction to Object-Oriented Programming and Design Principles, Michael Redlich**

**Abstract:** Object-Oriented Programming (OOP) is a programming paradigm that models real-world objects. The most well-known and widely-used OOP languages are C++ and Java, but some languages, such as Simula-67, were around much earlier. The advantages of OOP over structured programming include modularity and code re-use. As OOP has evolved over the years, things like design patterns and design principles have guided developers to write applications that are more adaptable to modification. This presentation will introduce OOP, its basic attributes (encapsulation, abstraction, inheritance, and polymorphism), the class mechanism, and some design principles that have led to the development of design patterns. Example C++ and Java source code will be reviewed to demonstrate the features of OOP and design principles.

**Bio:** See Saturday 1:30 pm

**SSB-103: Welcome Windows Users – Mac/Windows Compatibility, Dave Marra**

**Abstract:** With the ability to run Windows, work with PC documents and connect to PC networks, today's Intel-based Mac truly offers the best of both worlds: a no-compromises solution to having one computer that can seamlessly run both Mac and Windows. Combine the Mac's ability to run Windows with its legendary ease-of-use, built-in Universal Access tools, built-in iLife software and the lowest cost-of-ownership in the industry and discover why many PC users are making the switch to the Mac.

**Bio:** See Sunday 10:15 am

**SSB-131: Best Websites, Search Engines, and Software 2010, Eva Kaplan, Computers + Kids Camp/Pennington Computer School**

**Abstract:** Always involved in uncovering phenomenal new websites, search engines, and software offerings, Eva is ready to wow TCF attendees with her 2010 recommendations. These new sites and software options are pretested, currently up and running, and meet her criteria. For those at her presentation, there'll be an extensive handout. As a plus, there'll be a segment on what's new in computer technology

**Bio:** See Saturday 11:20 am

**SSB-223: Contributions made to Wireless Communication by G. Marconi, Robert Buus (W2OD)**

**Abstract:** Since April 25 is the 136th birthday of Guglielmo Marconi, it seems appropriate to review the many contributions that Marconi made to the wireless art. Starting as a young amateur experimenter in 1894, Marconi played a significant part in developing successful radio systems throughout the world. At the time of his death in 1937, radio stations throughout the world observed two minutes of silence to remember this famous man.

**Bio:** See Sunday 10:15 am

**SSB-225: ARRL National Traffic System: An Introduction, Greg Szpunar (N2GS) and David Struebel (WB2FTX), ARRL**

**Abstract:** The ARRL National Traffic System (NTS) is the system for passing formal third party messages via ham radio. Its origins date back to the early

years of the hobby. Modern day NTS makes use of voice and digital modes to pass messages within the US and Canada. The NTS is an important partner to ARES, RACES and other emergency communications entities. This presentation, with co-presenter David Struebel, will cover the origins, history, practices, and modes of NTS. It will describe in depth NTS digital operations, and provide a demonstration of those capabilities.

**Bio:** Greg Szpunar (N2GS) is an ARRL Official Relay Station and NTS Digital Relay Station and an active Net Control Station on several NTS local and Regional Nets. David Struebel (WB2FTX) is Section Traffic Manager for the Northern New Jersey Section and Eastern Area Digital Coordinator for NTS.

**SSB-226: Open Source Software Defined Radio (SDR), Robert McGwire (N4HY), AMSAT**

**Abstract:** Software Defined Radio is changing radio communication. This talk will explain SDR and describe its advantages and limitations. It will discuss how new SDR equipment is programmed and fitted for satellite activity.

**Bio:** Bob McGwire is the author of DSP/SDR for SDR-1000 Flex radio. He founded the AMSAT-TAPR DSP Project, and won the Dayton Hamvention Technical Achievement award in 1991. He is also the past VP of Engineering for AMSAT.

**Sunday 1:30 pm – 2:25 pm**

**SSB-129: Data Mining on Intra-Cranial EEG Obtained from Epilepsy Patients, Haimonti Dutta, The Center for Computational Learning Systems, Columbia University**

**Abstract:** This talk will describe a unique data set obtained from intracranial EEGs of patients suffering from epilepsy at Columbia University Medical Center and the challenges faced in mining this large volume of data. The focus will be on novel distributed machine learning algorithms such as Distributed Support Vector Machines and show how a gossip-based protocol using centralized mining algorithms can be scaled to run on very large data sets. Finally we will show how the anomaly detection algorithm, One Class SVM, can be made to run on a cluster to detect novelties in the data.

**Bio:** Haimonti Dutta is an Associate Research Scientist at the Center for Computational Learning Systems, Columbia University, NY. She received a PhD in Computer Science and Electrical Engineering from the University of Maryland, an MS in Computer and Information Science from Temple University and a Bachelor of Computer Science and Engineering from Jadavpur University in Kolkata, India. Her research interests include machine learning, distributed and scientific data mining, peer-to-peer (p2p) systems and data stream mining. She has been on the program committee for conferences including European Conference on Machine Learning and Knowledge Discovery and Data Mining Conferences and has published research papers at many conferences including ICDM, SIAM Data Mining Conference, HiPC and ICMLA.

**SSB-102: Science and History Resources of Central New Jersey, Frank O'Brien**

See Saturday 3:40 pm for Abstract and Bio

**SSB-130: A Brief Tour of Windows 7 and Office 2010, David Soll**

See Saturday 1:30 pm for Abstract and Bio

**SSB-103: iLife – Photos, Movies, Music and More!, Dave Marra**

**Abstract:** Rediscover creative new ways to work with digital photos, movies, music and more with iLife! The new iLife suite features exciting new updates to iPhoto, iMovie and GarageBand along with iDVD and iWeb, all with features specifically designed for education. In the classroom, over the internet or as part of a dynamic presentation or podcast. iLife offers today's students exciting new digital multimedia content creation tools that are powerful, fun and easy to use. Explore iLife today!

**Bio:** See Sunday 10:15 am

**SSB-131: How to Find Reliable Health-Related Sites, Mary Ginsburg, Gotham NY Personal Computer Users Group**

**Abstract:** There are millions of health-related sites on the Internet, but not all give valid information. How can you find the ones with the reliable information you need? In this seminar, we'll take a look at how to structure effective searches, how to separate valuable information from the questionable, and what to do with the information you find. We'll also look at some excellent sites. Each person attending will receive a CD with hyperlinked resources.

**Bio:** Mary Ginsburg has been searching for medical and scientific information on the Internet since pre-web days. She began using the Internet during her doctoral studies in cell biology and continues to perform professional searches both in her career as a medical writer and as a service to clinicians.

**SSB-223: Marketing Ham Radio - How You Can Help it Thrive Today, Cory Sickles (WA3UVV), Gloucester County Amateur Radio Club**

**Abstract:** Much like products, awareness and interest in amateur radio must compete for a person's time against a myriad of other activities. Marketing of some fashion is necessary to promote what we enjoy in order for it to continue to thrive. This presentation will provide attendees with ideas, tools, and case studies to assist them in promoting amateur radio through a variety of methods and demographics. The instructions and information presented are designed for experienced and inexperienced marketers or those interested in public relations.

**Bio:** First licensed in the early 70s, Cory Sickles (WA3UVV) has enjoyed participating and promoting amateur radio to others. He has taught classes and individuals and regularly exposes others to the possibilities and enjoyment of ham radio. He currently serves as the Public Information Coordinator for the American Radio Relay League's SNJ Section.

**SSB-225: WSPR-ing on the HF Bands, Joe Taylor (K1JT), Princeton University**

**Abstract:** WSPR (pronounced "whisper") stands for "Weak Signal Propagation Reporter." The WSPR software is designed for probing potential propagation paths using low-power beacon-like transmissions. WSPR signals convey a callsign, Maidenhead grid locator, and power level using a compressed data format with strong forward error correction and narrow-band 4-FSK modulation. The protocol is effective at signal-to-noise ratios as low as -28 dB in a 2500 Hz bandwidth. Receiving stations with internet access may automatically upload reception reports to a central database. The WSPRnet web site provides a simple user interface for querying the database, a mapping facility, and many other features. At the end of 2009, some 400 operators around the world were participating daily, and over 15 million "spots" had accumulated in the WSPRnet database. WSPR is open-source software, licensed under the GNU General Public License.

**Bio:** Joe Taylor was first licensed as KN2ITP in 1954, and has since held call signs K2ITP, WA1LXQ, W1HFV, VK2BJX and K1JT. He was Professor of Astronomy at the University of Massachusetts from 1969 to 1981 and since then has been Professor of Physics at Princeton University. He was awarded the Nobel Prize in Physics in 1993 for discovery of the first orbiting pulsar. He chases DX from 160 meters through the microwave bands.

**SSB-226: History of Computers for Tracking Satellites, Dominick Interdonato (NB2F), AMSAT**

**Abstract:** This talk will take the audience from analog tactile graphics to modern computer tracking programs.

**Bio:** Dominick Interdonato is AMSAT NJ Coordinator and professionally involved with Satellite communications and communications in general. He has been a member of AMSAT and Amateur Satellite user for over 20 years.

**Sunday 2:35 pm – 3:30 pm**

**SSB-129: Using Digital Cameras, Sumant Mehta**

See Saturday 11:20 am for Abstract and Bio

**SSB-102: An Introduction to Firefox Features and Customization, David McRitchie**

See Saturday 10:15 am for Abstract and Bio

**SSB-103: A Classroom in Your Pocket: The iPod as a Learning Tool, Dave Marra**

**Abstract:** Bring mobile learning to life with the iPod. No longer just a music device, today's iPod is a portable digital learning tool, enhancing all areas of curriculum, in and out of the classroom. From podcasting, to voice recording, to content delivery, to syncing with both Macs and PCs, the iPod, and the hundreds of educational applications available for it, are changing the way students learn and teachers teach. Rediscover the iPod today!

**Bio:** See Sunday 10:15 am

**SSB-131: Computers & Technology in Today's Public Schools, Eva Kaplan**

**Abstract:** Borrowing Intel's "Teach to the Future" catchphrase, the learning scope of digital products in today's schools will be illuminated by Eva Kaplan, a longtime educator and founder of Computers + Kids. The impact of digital exposure and literacy on curriculum goals, "brain fitness," and new - diverse - expressive communication options will be clearly outlined. This talk will cover the broad spectrum of computer and technology materials and games for early childhood through high school youth. Geared for parents, teachers, and the general public, the presentation will be a beguiling, do-not-to-be-missed one!

**Bio:** See Saturday 11:20am

**SSB-223: The Modular Rover, Rick Rosen (K1DS)**

**Abstract:** The development of my current rover station in a van, suitable for mobile, portable and rover operation for emergency communications, contesting and general operating is discussed. The focus is on VHF rover operation with my experience as a rover over the past 25 years in the mid-Atlantic states and New England.

**Bio:** See Sunday 10:15 am

**SSB-225: Weird Antenna Projects of New Jersey, Rebecca Mercuri (KA3IAX), Notable Software, Inc.**

**Abstract:** Many of us are already familiar with "Weird NJ" but how many of you can recount its numerous Weird Antenna Projects? Rebecca Mercuri, KA3IAX, will present a fascinating and entertaining talk that explores New Jersey's contributions to transmission history from telegraphy to Telstar! You will be taken on a virtual tour through the Garden State, featuring projects by Morse, Marconi, Tesla, Armstrong, Sarnoff and many more, along with some intriguing tales, photographs, and classic cold war era newsreel footage.

**Bio:** Rebecca Mercuri <www.notablesoftware.com> is a forensic computing expert with avid ham and audio interests. Her numerous accomplishments include providing testimony in the Bush v. Gore election controversy, speaking (briefly) with Susan Helms on the ISS in a Field Day contact, and receiving citations from the ARRL and Red Cross for her amateur radio service during the 9/11 effort. Rebecca also has a doctorate in Computer Science. She is an active member of the David Sarnoff Radio Club, the Vice-Chair of the IEEE Princeton/Central Jersey Section, an ex-officio board member of TCF and the Princeton area ACM/IEEE Computer Society, and an adjunct faculty member in TCNJ's School of Engineering. In her spare time, she enjoys gardening, mentoring future women engineers, and visiting lighthouses.

**SSB-226: Automatic Packet Reporting System, Brian Boccardi (N2MPM), NJ State Office of Emergency Management**

**Abstract:** APRS and where it fits in amateur radio and the world will be discussed. The presentation will include live operation of an APRS station, and cover the interconnectivity with other radios and the use of APRS in emergency operations.

**Bio:** Brian Boccardi has presented at TCF for many years and holds the amateur radio callsign N2MPM. He works with the NJ State Office of Emergency Management and with other agencies to promote APRS use in New Jersey and is active in many radio clubs.

## IN SSB ATRIUM

**There's a Theremin on the Radio! by Kip Rosser - Performances all day with presentations at 1:30 pm on Saturday & 12:30 pm on Sunday:** Kip Rosser applies his delightful blend of music and madness to a twisted history of the incredible relationship between the theremin and the radio...and himself. He tells it all through childhood musings and music from classic Sci-Fi movies to top radio ten hits like the Beach Boys' rock/theremin classic and Good Vibrations.

**Fine Art Digital Photography as a Fluid Canvas (Real & Surreal) by Herman Hinitz:** The photography work of Herman Hinitz will be on exhibit. This artist combines elements of science, technology, and computer processing to produce unique continuous tone mixed media fine art prints, and photographs.

**Circuit Bending by Kevin Meredith, Lonely Robot Audio and Rebecca Mercuri, Notable Software (Saturday only, 11:20 am – 1:20 pm):** Circuit bending is the creative short-circuiting of inexpensive, battery-operated kids toys, noisemakers, radios, electronic instruments, etc. to make new sounds. It's cheap, fun, and anybody can do it! All that is required is basic competence with a soldering iron (we can teach you!) and a healthy sense of anarchic creativity. Example bent instruments and effects will also be demonstrated, to the wonderment of all! For more information on this fascinating hobby, we suggest you peruse <http://www.anti-theory.com/soundart/> by Reed Ghazala, the "father of circuit bending."

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## TCF Spotlight on STEM Issues Sessions

### Focus on Women in Computer Science and STEM Fields in Holman 252

**1 pm – Great Careers in Computing!, Amanda Stent, AT&T Labs – Research:** Here is a well-kept secret: there are many great career opportunities in computing. However, right now the 'geek factor' keeps many people out of

the field. In this talk, Dr. Stent will first outline some of the advantages of being are computer scientists, and outline some ways to attract a more diverse population into computing.

**Bio:** Dr. Amanda Stent is co-author of the book *The Princess at the Keyboard: Why Girls Should Become Computer Scientists*. She is a Principal Member of Technical Staff at AT&T Labs - Research in Florham Park, NJ, where she works on spoken dialog systems, natural language processing and assistive technology. She has authored or co-authored over 50 conference papers and journal articles. She was previously an associate professor of computer science at SUNY Stony Brook and holds a PhD in computer science from the University of Rochester.

**2 pm – Panel Discussion – Gender Issues in STEM Education:** Join in a thoughtful, thought-provoking discussion on gender issues in STEM education facilitated by Dr. Stent and TCNJ STEM faculty. Years of research on these issues have identified both problems and solution; we will discuss the progress that has been made to make STEM studies more inclusive and what remains to be done. At the time of publication, TCNJ faculty panelists include Susan Donohue, assistant professor, Technological Studies; Connie Hall, associate professor and co-ordinator, Biomedical Engineering; Dasha Magee, assistant professor, Educational Leadership and Secondary Education; and Monisha Pulimood, assistant professor, Computer Science.

**1 pm – 2:15 pm and 2:30 – 3:30 pm in Holman 370, Junior Girl Scouts “Computer Fun” Badge Activity:** Junior Girl Scouts will have the opportunity to earn their “Computer Fun” badge at this year’s TCF! They will work with members of TCNJ’s Women in Computer Science in a well-equipped Mac lab to complete the required activities. (Sign up in advance required as space is limited).

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### Association of Personal Computer User Groups (APCUG) Meeting on Sunday in SSB-228

**10:15 am - What Are User Groups? Jay Ferron, Claudette Marshall, and Jim Scharoun, APCUG:** Members of different user groups will discuss the following topics: what a user group is; what you can get from user groups; and resources to help your group grow, including new technologies for boosting membership.

**11:20 am – Restoring Old Music and Records, and Creating New Music, Adam Zarboni, Magix Software:** Learn how to optimize and digitize any media from LPs and video sound to cassettes in this session. You’ll also learn how to restore and remove background noise from old recordings, and how to and save everything digitally on your hard drive, burn it onto CDs or DVDs, convert it to MP3 or WAV files, and much more. We’ll cover how to create music using your computer as well. No prior skills are needed to help you develop your own musical style. You’ll have access to extensive sound libraries to help you create super melodies.

**12:25 pm – Creating and Modifying Pictures and Videos, John Auvil, Magix Software:** Get more out of your photos by learning to use numerous unique design options and high-quality templates. Get excited about outstanding results; the applications we cover are perfect for preparing gifts and presentations or as an addition to other photo, video and website software. You will also learn how to transform your best video recordings into exciting theater-quality films in a flash, including background music, animated transitions, captions, and cinema-quality effects! We’ll cover how to import your video material into your PC, cut and edit it, and then burn it directly to disc with professionally animated menus for DVDs and Blu-ray discs™.

**1:30 pm – Using the Computer When Vision is an Issue, Claudette Marshall:** We will cover software and hardware solutions for computer users who are visually impaired. Software that integrates magnification and screen reading for vision impaired computer users will be among the solutions demonstrated. The use of large print keyboards will also be discussed.

**2:35 pm – Upgrading to Windows 7, Jay Ferron:** We will look at methods of upgrading to Windows 7 with a live demonstration using free tools. Learn how you can offer this service to your member groups

a computer scientist. Then she will present the latest statistics about people who

