2015 IEEE/ACM TCF Information Technology Professional Conference (TCF Pro IT)

Program Book

Date: Friday, March 20, 2015 to Saturday, March 21, 2015
Time: 8:00AM to 5:00PM
Location: The College of New Jersey, Ewing, New jersey

Sponsors:

Princeton / Central Jersey Chapter of the IEEE Computer Society

Princeton Chapter of the Association for Computing Machinery

IEEE Region 01- Northeastern USA

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Princeton / Central Jersey Section of the IEEE

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Program Committee

Conference Chair: David Soll

Program Chair: Annette Taylor

Conference Treasurer: Josephine Giaimo

Thank you to our Sponsors, Speakers, Volunteers and Participants!

Also, thank you to the Trenton Computer Festival and the College of New Jersey.

Conference Logistics

Dear Participants,

Welcome to the **2015 10th Annual IEEE/ACM Information Technology Professional Conference at TCF**! We have an exciting program this year and are looking forward to seeing you.

Schedule:

The ITPC Conference program schedule is posted on our web site at: http://princetonacm.acm.org/tcfpro/pc2015.html.

Our conference presentations are scheduled to at **begin 8:30 AM to 5:00 PM on Friday, March 20, 2015** and include **extended sessions at 10:15 AM to 5:00 PM on Saturday, March 21, 2015** combined with the Trenton Computer Festival.

Registration:

Registration is in **Brower Student Center (BSC) on Friday at 8:15 AM in the Reception area in front of Room 202**. Your badge will be good for both Friday and Saturday sessions. Your registration also includes general admission to the Trenton Computer Festival.

On Friday, a continental breakfast will be available from **8:15 AM until 9:00**, prior to the start of the presentations in **Room 202East**.

Presentations:

All *Friday* presentations will be given in **Brower Student Center (BSC) rooms BSC-202West, BSC-210 and BSC-211.** All *Saturday* presentations will be given in the **Education Building, Room ED-211**. The talks will be in classrooms equipped with a projector with a VGA style connector. We will also have a spare projector, just in case of a failure. Each presentation is 50-55 minutes and the audience averages 30 people including a diverse mix of practicing professionals, educators, interested engineers and students.

Lunch:

Lunch will be served on **Friday, March 20, 2015**, at **12:00 PM to 1:30 PM** in **Room 202East**. Our lunch will include a facilitated networking session as well as some door prizes.

TCF Keynote:

The TCF keynote featured speaker, Dan Rosenbaum, Technology Journalist and Wearable Tech Insider, will talk on "Approaching Singularity," on **Saturday, 2:35 PM to 3:30 PM** in the **Education Building, ED-115**.

Banquet:
There is a **Banquet on Saturday evening at 6:00 PM** and you are invited! We hope to see you there! Dan Rosenbaum, our keynote speaker and Award-winning Writer, will present short remarks at the Banquet. It will be held in the **Brower Student Center (BSC), Room 202West.** Advanced reservations are requested. The cost for the banquet is $15 for speakers and $25 for other attendees. Payments are accepted and required at registration. Please make your reservation as soon as possible by sending an email to: Al Katz alkatz@tcnj.edu.

Posted Presentations:

Some of the presentations may be posted on the website: http://princetonacm.acm.org/tcfpro/

Maps:
The TCF **TCNJ Campus** map can be found at:
http://princetonacm.acm.org/tcfpro/TCF14_CAMPUS_Map.pdf

The **Brower Student Center** (**BSC)** floor plan can be found at:
http://princetonacm.acm.org/tcfpro/BSCFloorPlan.pdf

The **Education Building (ED)** floor plan will be provided at the TCF registration desk on Saturday.

Parking:
Parking for Friday, March 20, 2015 is in **Lots 3, 4 and 5** closest to the Brower Student Center (BSC), but any open parking lot is available for ITPC. Parking for Saturday is **in Lots 17 and 18** by the Education Building (ED).

Lodging:
Please refer to the TCF website: http://tcnj.pages.tcnj.edu/about/campus-info/hotels/ for more information. There is a group discount for "The College of New Jersey Conference."

TCF:
The **40th Annual Trenton Computer Festival TCF@40** will be held at The College of New Jersey, Ewing Township, NJ on Saturday, March 21, 2015 between 9 am and 5 pm. This year's theme is Wearable Technologies. The program includes over 50 panel sessions, workshops, tutorials, demonstrations, educational events and a Flea market. For more information go to: www.tcf-nj.org. There is also a Special TCF@40 event this year! All who attended TCF in its early days are invited back and will receive special VIP recognition at a PC Pioneer Reception. Please contact TCF@40 host Dr. Allen Katz alkatz@tcnj.edu ASAP to be acknowledged.

Thank you for your participation,

Annette Taylor
Program Chair
IEEE Information Technology Professional Conference
http://princetonacm.acm.org/tcfpro/

Presentation Schedule – Friday

	Friday, March 20, 2015 Information Technology Professional Conference		
	Development & Professional Development BSC-211	**Technology& Management** BSC-210	**Cloud & Security** BSC-202West
8:00 AM	R E G I S T R A T I O N		
9:00 AM	Design-Driven Analysis and Data Integration of Energy Physical Systems and Cyber Control/Management *Madhav Manjrekar*	Platform as a Service (PaaS), Infrastructure as a Service (IaaS) *Fredrick Dande*	Danger in the Public Cloud *Joe Levy*
10:00 AM	Beyond the UML *Brian Berenbach*	Correlation Between Activity and Nutrition Tracking with Biometric Changes *Chris Gaur & Dr. Jean F. Coppola*	What impact does 'Internet of Things' have on Cloud Computing? *Ron Guida*
11:00 AM	Improve your software designs with Design Heuristics *Dennis Mancl*	Distributed Collaboration of Working Groups in Global Airline Operations: Leveraging Smartphone Functionalities *Doug Schutz & Dante Dionne*	The Cost of the Cloud: A case study of softwareasaservice costs using AWS *Steve Saporta*
12:00 PM	L U N C H & F A C I L I T A T E D N E T W O R K I N G S E S S I O N BSC-202East		
1:40 PM	The Do's And Don'ts Of Data Visualization: How To Avoid Being Lead Astray By Your Data *Jennifer Shin*	Legal Issues 2015 *Fred Wilf*	Security Management *Jane LeClair & James L. Antonakos*
2:40 PM	Software Quality Assurance from Theory to Implementation *Amal Abd El-Raouf*	Electronic Health Records *David J. Wallach*	Emerging Trends in Denial of Service Attacks *Marc Kowtko*
3:40 PM	Data Scientist: A Career for 2015 and Beyond *Richard F. Eng*	Telehealth *Jose Lebron, Kimberly Escalante & Dr. Jean F. Coppola*	The Growing Threat of Malware and Data Theft *Joseph Gentile*

Presentation Schedule – Saturday

	Saturday March 21, 2015 Information Technology Professional Conference @ TCF
	ITPC BSC-211
9:15 AM - 10:10 AM	R E G I S T R A T I O N
10:15 AM - 11:10 AM	Software Development Apprenticeships: Closing the Skills Gap by Investing in Potential *Kyle Thomas & Catherine Jaros*
11:20 AM - 12:15 PM	Expressing HIPAA Legal Rules as Privacy Policies *Tariq Alshugran & Julius Dichter*
12:25 PM - 1:20 PM	A New Breed of Spreadsheet Computing *Enzo Alda*
1:30 PM - 2:25 PM	Investigating the Future of Mobile Cloud Computing *Zyad Nossire*
2:35 PM - 3:30 PM	Keynote: Approaching Singularity *Dan Rosenbaum*
3:40 PM 4:35 PM	Universal User Interface Design: Accessible Mobile Application Development for People with Visual & Physical Impairments *Martine (Tina) Nezerwa, Dr. Jean F. Coppola, Stefan Howansky, Keith Wright, Tony Chen, Jake Terranova & Jacob Fried-Stahl*
4:40 PM - 5:55 PM	TCF Pioneers Reunion - Special Event <Brower Student Center>
6:00 PM	Banquet *< BSC 202W >*

9:00 AM – 9:50 AM Presentations

Design-Driven Analysis and Data Integration of Energy Physical Systems and Cyber Control/Management Systems

Madhav Manjrekar

Track: Development & Professional Development
Brower Student Center, room BSC-211
9:00 AM - 9:55 AM

Abstract:

Modern substation integrated systems trend to increase the level of power system automation and remote accessibility, to deliver information to a wide range of users in near real time and also allow for the control of tasks that streamline operations and performance. This drastic increase in sophistication of internet (cyber) – based systems is exposing the electric power industry to a growing risk of electronic intrusion. As seen today, every month there are reports of threats and attacks from hackers, disgruntled employees, and terrorists attempting to breach and/or corrupt sensitive control systems of utilities. However, many defensive techniques and practices have been used to reduce potential cyber-attack and electronic intrusions. Our work defines a Risk Reduction Methodology that analyzes early and potentially weak designs using a Real Time Digital Simulator (RTDS) that will surface the access points and control levers vulnerable to cyber intrusions. A key step is to perform both steady state and dynamic power flow simulations on a candidate 500kV Minneapolis-Winnipeg transmission network to understand potential impacts necessary to prioritize the proper protections and thereby reducing risks from the cyber threat.

Biography:

Dr. Madhav Manjrekar, Senior Member of IEEE, is an Associate Professor at the University of North Carolina in Charlotte. He has led technology and innovation teams in the areas of green energy and power systems for the past 15 years. Prior to joining academia in 2012, Dr. Manjrekar was the Vice President of Global Research and Innovation at Vestas (the wind turbine company), and previously has held various leadership and management positions at Siemens, Eaton and ABB. He holds 7 US and international patents, has published 35 journal and conference papers and has received an IEEE prize paper award. Dr. Manjrekar

has also served on various task forces, including High Mega-Watt Leadership Team of NIST, the Smart Grid Task Force of NERC, IEEE Standard P2030, and on review panels for ARPA-E, and NSF. He has been inducted into the IEEE Eta Kappa Nu Honor Society in 2014 and has been identified as an Emerging Leader for 2015 by the E4 Carolinas Leadership Program. Dr. Manjrekar's research interests are in Utility Applications of Power Electronics, Renewable Energy Systems, Energy Storage Integration, Smart Grids, and Cyber Security of Electrical Infrastructure.

Platform as a Service (PaaS), Infrastructure as a Service (IaaS)
Fredrick Dande

Track: Technology & Management
Brower Student Center, room BSC-210
9:00 AM - 9:55 AM

Abstract:

In 2003, most people in the IT industry got a rude shock with an article publication titled "IT doesn't matter". The authors belief that "As information technology's power and ubiquity have grown, its strategic importance has diminished. The way you approach IT investment and management will need to change dramatically."(Carr 2003 pg1). Carr's proclamation 10 years ago has actually come to be true and some of the technologies that are testaments to this include Virtualization, Cloud Computing, Data Deduplication (Dedupe) and Big Data. With years in the works and 15 drafts, the National Institute of Standards and Technology's (NIST) working definition of cloud computing, the 16th and final definition has been published as The NIST Definition of Cloud Computing (NIST Special Publication 800-145) .
The contribution of this paper illustrates the cloud deployment models including Platform as a Service (PaaS), and Infrastructure as a Service (IaaS). A vivid understanding of these models will not only enable, and provide adopters with knowledge needed to decide the cloud computing model to adopt but also ensure it serves both their business and technological needs with risk and security quantitatively and qualitatively analyzed. A comparative summary of current state of PaaS and IaaS cloud computing model adoption across different industries will help others comprehend how adoption challenges have been handled.

Biography:

Fredrick Dande is the Technical Services Manager at Janney. He is responsible for strategic objectives such as developing and implementing enterprise infrastructure policies and procedures, tracking and driving departmental goals, monitoring and reporting of departmental progression, establishing a quality focused service culture, and managing Janney's Information Technology infrastructure. He has over 10 years experience in IT within the financial services Industry. Fredrick is certified Project Management Professional (PMP) and a member of the Project Management Institute. He is also the Board of Directors of the Junior Achievement of New Jersey. Fredrick earned his bachelor's degree in Engineering Technology, a Masters degree in Management of Technology both from New Jersey Institute of Technology and later his MBA from University of Massachusetts's Isenberg School of Management.? He is currently pursuing a Doctorate degree in Management of Technology at Indiana State University with a specialization in Digital communication. Fredrick Dande, MBA, PMP | Wilmington University

Danger in the Public Cloud
Joe Levy

Track: Cloud & Security
Brower Student Center, room BSC-202W
9:00 AM - 9:55 AM

Abstract:

The work day isn't 9 to 5; the workplace isn't just the office. Your companies' employees are using personal equipment (mobile BYOD & home computers) as well as corporate controlled assets to get their jobs done. Chances are that they are also using public cloud storage (e.g., Google Drive, Dropbox) to move corporate data between people and devices. Is it safe to have company confidential data and documents in the same Dropbox account as somebody's shared vacation photos? Can the use of these services be addressed solely as a corporate governance matter, or should an in-house IT service be part of the solution?

In this talk, Joe Levy discusses the use of public cloud storage in business, its legitimate benefits, and some of the risks it presents to security and compliance.

As one possible solution, he discusses providing public cloud storage features and ease-of-use, behind the firewall and under control of corporate IT, using the Open Source OwnCloud product. An OwnCloud installation can provide many of the services your business users need, while keeping storage in-house, with access under internal control. It is available with subscription support under an Enterprise license,

or at no cost under an Open Source license. Pre-built images are available to allow you to explore OwnCloud's capabilities and limitations with very little investment in time or physical resources.

Biography:

Joe Levy is a Management Consultant, Business Analyst, Electrical Engineer and Open Source Evangelist. He has extensive experience as liaison between core competency business units and the engineering and IT resources that support their operation.

10:00 AM – 10:50 AM Presentations

Beyond the UML
Brian Berenbach

Track: Development & Professional Development
Brower Student Center, room BSC-211
10:00 AM - 10:55 AM

Abstract:

The unified modeling language wears many hats. It is used for sketching of designs, for creating complex architectures, and for making full models, occasionally with sufficient semantics to permit direct code generation from the model. One use is that of process modeling, usually for the creation of use cases from which requirements can be captured. On rare occasions, the UML is used to capture the processes of a business for the purpose of business process reengineering. The author, in trying to use the UML for process modeling and requirements elicitation and analysis over a period of many years, found significant deficiencies in the UML that greatly impeded requirements capture. In an effort to overcome the systemic weaknesses in the UML, a new visual language that focused on requirements capture, the Unified Requirements Modeling Language (URML) was created and superimposed on the UML. In this talk, the author will discuss some of the weaknesses of the UML; the evolution of the URML, and its use for the creation of commercial systems. Some features of the language will then be illustrated by an analysis of the Bhopal disaster and requirements capture for the phlebotomy medical process.

Biography:

Brian Berenbach recently retired from his position as a senior systems engineer at Siemens Corporate Technology. He currently lectures in systems engineering at the Georgia Tech Research Institute. Mr Berenbach is an INCOSE ESEP and an ACM distinguished engineer. He has over 40 years' experience as a systems engineer and has published widely on systems and requirements engineering.

Correlation Between Activity and Nutrition Tracking with Biometric Changes
Chris Gaur, Dr. Jean F. Coppola & Laura Sookhai

Track: Technology & Management
Brower Student Center, room BSC-210
10:00 AM - 10:55 AM

Abstract:

This 8 week pilot study tested the correlation between activity and nutrition tracking with biometric changes, including blood pressure and weight measurements. Furthermore, this technology was designed to serve diverse socioeconomic aging communities in Westchester County and New York City. By encouraging more activity and better nutrition, the research team's objective was to improve overall health and wellness as correlated by vital sign data and self-reported changes. The pilot study yielded early indications that the older adults are interested, willing, and able to use the technology to better educate themselves and change their lifestyle.

Biography:

Christopher Gaur is in charge of sales, marketing, and staff management for Vital Care Services. Before co-founding Vital Care, Chris worked three years in the telehealth industry. He is a licensed volunteer New York State Emergency Medical Technician. Christopher graduated from The Lubin School of Business at Pace University and received his BBA in Marketing with a concentration in Advertising & Promotions.

Biography:

Jean F. Coppola Holds a BS in CS, MS in Telecom, MS in CS, and PhD in Computing Technology in Education with 19+ yrs experience in Academic Computing/Information Technology. Dr. Coppola has 80+ presentations in service-learning, intergenerational

computing, smart e-classrooms, gerontechnology, & critical thinking while publishing 30+ articles. She has also advised student teams winning the NY Campus Compact Carter Academic Service Entrepreneur in recognition of service-learning excellence. Current research focuses on service-learning/civic engagement and gerontechnology. Since 2005, has worked with a research team studying the effect of technology on older adult life quality, attitudes towards aging, cognitive functioning, and student attitude change towards elderly via a service-learning intergenerational computing program where outcomes have led to awards including: American Society of Aging MetLife MindAlert Award for Mental Fitness Program; Isabel Brabazon Award for Evaluation and Research in Intergenerational Programs; Women: Builders of Communities and Dreams; and Jefferson Award for Public Service.

Biography:

Laura Sookhai is a recent Pace University graduate as of December 2014. Having already obtained an A.S.S. in Computer Security and Forensics at Westchester Community College, she now holds a Bachelor of Science from the Seidenberg School of Science and Information Systems, with a major in Information Technology and a minor in Criminal Justice. With her academic experience in cyber security and her professional experience with the Yonkers Police Department she hopes to pursue a future career in Cyber Forensics.

What impact does 'Internet of Things' have on Cloud Computing?
Ron Guida

Track: Professional Cloud & Security
Brower Student Center, room BSC-202W
10:00 AM - 10:55 AM

Abstract:

This presentation will address the following pressures on the enterprise today:

Verizon estimates that there were "only" about 200 million *'things'* connected to the Internet in the year 2000. In the wake of unprecedented innovation on a host of fronts — including video, mobility, social media, analytics, and cloud — this number has risen to approximately 10 billion today, and a significant upsurge to 100+ billion connected devices is expected by 2020. Resulting in an explosion of 10x the amount if data 'in use' today versus that amount of data 'in use' in the next 60 months. We're nearly creating the equivalent of one 'Yahoo' sized amount of data nearly each working day.

By connecting the unconnected, we will give rise to new sources of value for organizations in the coming years. Cloud, as a democratizing force for IT-led value, will be one of its principal enablers. The shared services capability inside of this 'connected' enterprise must be able to securely collect, process, transmit, analyze, and store this data. Capability must exist to deliver secure access, enable continuous innovation and deliver support and maintenance 7 x 24. How does the organization pay for, develop, and integrate this today into their DNA now and into the future?

Biography:

Ron Guida is a 25+ year industry veteran with start-ups and Fortune 15 companies. He is a Principal Consultant for Cloud, IoT, and Security Services for Verizon. He is responsible for delivering day-to-day direct sales and business development. This includes formalizing strategic relationships and driving revenue with target accounts across all channels including direct customers, OEM/ISV's, systems integration firms, technology alliances and partnerships.

Examples of publications and presentations: https://www.linkedin.com/in/ronguida

11:00 AM – 11:50 AM Presentations

Improve your software designs with Design Heuristics
Dennis Mancl

Track: Development & Professional Development
Brower Student Center, room BSC-211
11:00 AM - 11:55 AM

Abstract:

Design heuristics are a set of simple rules for evaluating software designs. A large number of development projects fail because the developers pay inadequate attention to well-established design principles -- they design classes and modules that are too large, complex, and inflexible, or they design collections of classes and functions that are too inefficient. The design heuristics are a good set of rules to guide developers as they create their own designs or review the designs built by others. In this talk, we will show examples of "action oriented" versus "object oriented" designs, god classes, object collaboration, and proper use of inheritance.

Biography:

Dennis Mancl is a Distinguished Member of Technical Staff at Alcatel-Lucent. He has been working with object oriented designs, UML modeling, use cases, and design patterns for over 20 years. Dennis has M.S. and Ph.D. degrees in computer science from University of Illinois. In his spare time, Dennis is an amateur musician: he enjoys everything from Bach to Basie, and he plays oboe, clarinet, and saxophone.

Distributed Collaboration of Working Groups in Global Airline Operations: Leveraging Smartphone Functionalities
Doug Schutz & Dante Dionne

Track: Technology & Management
Brower Student Center, room BSC-210
11:00 AM - 11:55 AM

Abstract:

For nearly five decades, airline employees at airports from around the world have relied upon two-way radios for communicating with one another. However, this legacy technology is becoming no longer adequate for enabling airline employees to effectively and efficiently share their knowledge. This is a becoming a key challenge for organizations in this dynamic industry where sharing knowledge can directly impact the ability to meet and exceed customer expectations for competitive advantage. Drawing from the literature streams of IT mobility, platforms, and IT design principles, a theoretical framework is developed. The usefulness of the framework is illustrated in the field through a pilot study implementation of smart phones by in a large global airline at a major airport. Data is collected and triangulated by survey, observation, and interviews. Through the framework, this action research study reveals not only why the airline should replace its radios with smartphones, but also how. The study concludes with managerial and theoretical contributions as well as recommendations for future research.

Biography:

Douglas M. Schutz is a Visiting Associate Professor of Information Systems, International Business, and Management at the Tokyo University of Science in Japan. He received a Ph.D. in Business Administration focusing on Management Information Systems (MIS) from the Fox School of Business of Temple University at Philadelphia, an MBA in MIS from the McCombs School of Business of the University of Texas at Austin, and a B.S. in

Electrical Engineering from the United States Naval Academy at Annapolis. Doug was one of 40 Ph.D. students selected globally to present his research at the International Conference on Information Systems (ICIS) Doctoral Consortium in Shanghai, China. His research has been nominated Best Paper at the Hawaii International Conference on Systems Science (HICSS), and his work has been published in the proceedings of the Japan Society of Information and Management (JSIM). Prior to academia, Doug worked as an IT manager and consultant in the electric utility industry for two Fortune 500 companies, where his responsibilities included IT disaster recovery from Hurricane Katrina. Previously, he served as an unrestricted line officer in the U.S. Navy onboard a guided missile destroyer and the second Aegis cruiser.

Biography:

Dante Dionne is an Organizational Leadership PhD candidate and Senior Innovation Technology Manager at Korean Air. The past 20+ years of his career has centered on management and professional services consulting. Specializing in leading multi-national project teams in the design and implementation of digital marketing, mobility and innovative technology solutions. Dante holds an MA in Industrial/Organizational Psychology from the Chicago School of Professional Psychology and a BS in Business Management with a minor in Computer Science.

Dante is an adjunct faculty member at the Chicago School of Professional Psychology with Graduate level teaching credits in Psychometrics, Data Management and as a Visiting Scholar at the Tokyo University of Science. Dante's dissertation research spans several specializations in psychology including: Organizational, Social, Cultural, Developmental, Cognitive, Performance, Sports, and Positive Psychology. Dante is also an active member of APA Division's 14 (SIOP), 13 (SCP), 47 (Exercise and Sports Psychology) and 46 (Media Psychology and Technology).

The Cost of the Cloud: A case study of softwareasaservice costs using AWS
Steve Saporta

Track: Cloud & Security
Brower Student Center, room BSC-202W
11:00 AM - 11:55 AM

Abstract:

Many people take it for granted that cloud hosting is the most cost effective option for a small software company. But if you want to be sure, you've got to do the math. Storage, bandwidth and I/O costs all count. Accurate prediction of these costs requires modeling and testing of how your product and its users will behave. SwipeToSpin is a B-to-B software startup that decided in early 2014 to host on AWS and has recently scaled up to 100 customers. We'll examine the decision process, with:

● An explanation of the capacity-planning tests that were conducted

● A quantitative analysis of the storage and bandwidth requirements of a graphics-intensive application

● The calculation of costs for storage, bandwidth and I/O, with actual dollar figures

This presentation is ideal for a moderately technical audience. A few code samples will be shared, but knowledge of programming is not required. Attendees will learn how to make an informed choice about cloud hosting and will receive tips for increasing performance and reducing cost.

Biography:

Steve Saporta is a technology executive with a wide range of experience in all aspects of software engineering and business. Hired as the third employee of Midi, Inc., he served as a programmer, technology manager and CTO during the company's growth to more than 40 employees, acquisition by a team of investors, and merger with the publicly traded company SAI Global. Steve then became CTO of LocalUp Solutions (now OrderUp), where he built and led the team that developed and supported ecommerce software serving more than 500,000 customers. His next position was as the CTO of Joule Assets, a startup in the energy industry. Steve currently serves as Chief Technology Officer of SwipeToSpin, a New York Citybased startup that produces interactive, photorealistic 360degree walkarounds for automotive clients. He has recently appeared as a panelist at the Rutgers Career Exploration and Networking Series: Computer Science & IT, and as a guest speaker to a software engineering class at Penn State. A graduate of Princeton University in Computer Science, Steve enjoys cycling, skiing, and playing the electric bass.

1:40 PM – 2:30 PM Presentations

The Do's And Don'ts Of Data Visualization: How To Avoid Being Lead Astray By Your Data
Jennifer Shin

Track: Development & Professional Development
Brower Student Center, room BSC-211
1:40 PM - 2:30 PM

Abstract:

Data visualization is growing in popularity, but there is a wide range of opinions on the requirements for creating one. This talk will focus on data visualization from the perspective of a data scientist and present real world examples ranging from environmental grants to theoretical mathematics.

The talk will begin by presenting an overview of the present state of data visualization including an overview of the tools and methods for representing data. I will also review a list of pitfalls and what can be done to avoid being led astray by data.

Biography:

Jennifer Shin is the Founder and Principal for 8 Path Solutions LLC, a data science, analytics and technology company based in NYC. She is also a management consultant at GE Capital, a featured writer for IBM Data Magazine, and a technology expert on eHow.com. Her expertise has been sought out by numerous publications, conferences and organizations, including IEEE, ACM, Cornell University, Baruch College, IBM, Monster, SBA, SCORE, Hiscox Insurance, and the Open Analytics Summit. Jennifer received her undergraduate degree in Economics, Mathematics & Creative Writing from Columbia University and her graduate degree in Statistics from Columbia University.

Legal Issues 2015
Fred Wilf

Track: Technology & Management
Brower Student Center, room BSC-210
1:40 PM - 2:30 PM

Abstract:

When we say "the law keeps tries to keep up with changes in computer technology," we really mean legislators, judges, developers and owners try to resolve legal issues involving computer technology. Not surprisingly, "the law" sometimes stumbles. This year, we will discuss the latest strides and stumbles in software patents, internet-distribution of television signals and data privacy, among other topics that may crop up at the last minute. Bring your questions!

Security Management
Jane LeClair & James L. Antonakos

Track: Cloud & Security
Brower Student Center, room BSC-202W
1:40 PM - 2:30 PM

Abstract:

For an organization that does not have an existing security management program, or for an organization that has an existing security management program but wants to update it and expand it, a good place to start is with the 20 Critical Controls. The 20 areas covered by the Critical Controls are essential to providing an organization with a strong security posture and preparation against cybersecurity attacks. The Critical Controls look at all aspects of the organization, from hardware to software (operating systems, application programs, malware defense, vulnerability scanning and penetration testing), employee security awareness training, access control, incident response, and secure network engineering. Establishing a security management program based on the 20 Critical Controls requires a dedicated staff, time, and resources from the organization, and a planned approach to implementation that spans many quarters due to the comprehensive nature of the controls. A good exercise to perform involves looking at each of the Critical Controls and assessing where your organization meets or does not meet the requirements. That initial assessment then paves the way for a plan to implement non-existent controls and strengthen existing ones.

Biography:

Dr. Jane LeClair is the Chief Operations Officer at the National Cybersecurity Institute in Washington, D.C. Her work at the Institute draws from her talents and education in cyber security, nuclear technology, business administration and education. Dr. LeClair is a well respected speaker and has given presentations worldwide to groups ranging

from the International Atomic Energy Agency to the FBI, the American Nuclear Society to the Association for Continuing Higher Education. Her recent book, "Protecting Our Future: Educating a Cyber Security Workforce" was published in January 2014 and explores numerous subsectors of cyber security that have been overlooked in past publications. Recognized as a leader in the technology industries, Dr. LeClair is the recipient of numerous awards and is a strong advocate for women in technology.

Biography:

James L. Antonakos is a professor of Computer Studies at Broome Community College, where he has taught since 1984. James teaches both in the classroom and online in classes covering electricity and electronics, computer networking, computer security and forensics, and computer graphics and simulation. James is also an online instructor and faculty advisor for Excelsior College and an online instructor for Sullivan University. James has extensive industrial work experience as well in electronic manufacturing for both commercial and military products. James is the author or co-author of over 40 books on computers, networking, electronics, and technology. He is also A+, Network+, and Security+ certified by CompTIA.

2:40 PM – 3:30 PM Presentations
Software Quality Assurance from Theory to Implementation

Amal Abd El-Raouf

Track: Development & Professional Development
Brower Student Center, room BSC-211
2:40 PM - 3:30 PM

Abstract:
This presentation will show the changing face of Software Quality. It starts with the traditional models of the software development lifecycle, the move towards agile methods that are widely used by practitioners nowadays. When it comes to software, the application quality is not only determined by the code quality, but also depends on other quality factors. This presentation will include the different quality factors that should be considered over the software development lifecycle. The presentation will also suggest some software testing tools to integrate testing into our eventual goal of a high quality software product.

Biography:

Amal Abd El-Raouf is currently an associate professor at the Computer Science Department, Southern Connecticut State University, United States. She is a member of the Parallel Processing Group, Information and System Department, Electronic Research Institute (ERI), and a member of the Greater Hartford ACM Chapter. Her research interests include Software Engineering, Software Quality, Real Time Systems, Parallel and Distributed Computing, Object Oriented Systems, and Computer Networks. She has taught the software engineering course at the graduate program since 2009 and recently she started teaching a Software Quality course that is taught only in a few graduate programs across the country. She is the author of several papers in journals and international conferences in the field of Software Engineering. She received her PhD in Computer Science and Engineering in June 2005 from the University of Connecticut and joined Southern Connecticut State University in August 2005.

Electronic Health Records

David J. Wallach

Track: Technology & Management
Brower Student Center, room BSC-210
2:40 PM - 3:30 PM

Abstract;

Electronic Health Records are digitally stored files containing patient private health data which can be shared instantaneously. The ultimate goal of migrating to such a system is to create a global database to not only promote accessibility, but to aggregate and track health trends and the origin of disease. These features are only prominent and evident in locations in which EHR is present and implemented. The process to implement EHR is involved and requires a lot of man-power, smaller medical practices have difficulty keeping up, and a high rate of failure. This failure is a detriment to the usability of the system as a whole. Research conducted at an internal medical practice documented a failed implementation in which exposed many flaws in the current infrastructure, which has placed EHR development years behind the technological curve. The implementation of these failures are significant.

Biography:

David J. Wallach is the IT Operational Manager at Babylon Medical Practice, a comprehensive internal medicine facility located on New York's Long Island. He is studying Information Technology at Pace University with a minor in Psychology. He will be graduating in December 2014; his graduate studies in Information Systems at Pace University will begin in January of 2015. His passion for the computing field is reflective in his work as well as in his philanthropy, dedicating time to community programs such as the FIRST Tech Challenge hosted in Pleasantville, NY.

Emerging Trends in Denial of Service Attacks
Marc Kowtko

Track: Cloud & Security
Brower Student Center, room BSC-202W
2:40 PM - 3:30 PM

Abstract:
In late November of 2014, Sony Pictures Entertainment, Inc. was attacked and successfully compromised by a hacking group called the "Guardians of Peace" (GOP). As Sony begins to assess the damage, the group promptly uploaded most of the compromised data on open file-sharing and networking sites. In an effort to disrupt cyber-criminals and curious users from access stolen records and other confidential information leaked by GOP, Sony has orchestrated a massive Distributed Denial of Service attacks (DDoS) against the providers containing the compromised files. This new counter-offensive attack is practically unseen of in the United States as the federal government has often advised against it. While Denial of Service (DoS) attacks have often targeted a select number of systems, including those on a massive scale, new DoS attacks are emerging that can target a single user. In this case, Personal Denial of Service (PDoS) attacks can be a devastating for users who are in time-sensitive or time-priority positions. This can potentially affect individuals involved in legal and contracting professions where time-is-of-essence is crucial to work performance. This paper/presentation will study these emerging trends in denial of service attacks and assess the consequences of such attacks against their targets.

Biography:

Marc Kowtko is a graduate student at Pace University in Pleasantville, NY. His graduate major is a Masters in Information Systems with a concentration in Information Assurance. His undergraduate major was a B.S. in Information Technology

with a concentration in Computer Security and Networking; minors include criminal justice and law. Marc continues to study Information Security topics from network penetration, access control, data privacy, and computer laws. He is currently conducting research in this field under Dr. Jean Coppola's Thinkfinity Grant. In addition, Marc Kowtko has participate in information security/assurance conferences and participated in the 2011 and 2012 Cyber-security Collegiate Defense Competition northeastern regional and 2013 Qualifier. Marc is also an active member in IEEE, ACM, Golden Key, Upsilon Pi Epsilon (UPE) and is a Fellow in Pace University's Dyson Society of Fellows. He is also the former scholarship recipient of the National Science Foundation Scholarship-For-Service (NSF-SFS) federal program for the 2012-2014 respective years. Marc has also presented a presentation about Information Security, Computer Forensics, and Information Privacy at their annual Society of Fellows meeting in 2011, 2012, 2013, and 2014.

3:40 – 4:30 PM Presentations

Data Scientist: A Career for 2015 and Beyond
Richard F. Eng

Track: Development & Professional Development
Brower Student Center, room BSC-211
3:40 PM - 4:30 PM

Abstract:

Thomas H. Davenport heralded "Data Scientist: The Sexist Job of the 21st Century." Beyond the hype of Big Data and companies clamoring for data scientists and data analytics talent what steps can professionals take to transition to an actual data scientist or data analyst career in 2015 and beyond? The presentation will define data analytics, the skills required, and venues for acquiring those skills. A survey of data analytics training, certification and degree programs will be provided. An overview of salaries, an assessment of challenges, and opportunities faced in transitioning to a new data scientist career.

Biography:

Richard F. Eng is Associate Department Head of Applied Software Engineering and Analytics at The MITRE Corporation. Richard's work experience has included companies such as Noblis (formerly Mitretek Systems), Lucent Technologies, and International Business Machines. He has been an Information Technology professional

for over 20 years working in defense, health, telecommunications, and financial sectors. Richard is currently applying his software and data analytics skills to real world software projects. He has applied decision trees, neural networks, and text mining models to solve technical and cost problems for his customers. Richard has an MBA from Georgetown University, an MS in Bioengineering from NYU Polytechnic, a BS in Chemistry from NYU Polytechnic. He is currently pursuing an MS in Data Analytics from the University of Maryland.

Telehealth

Jose Lebron, Kimberly Escalante & Dr. Jean F. Coppola

Track: Professional Development / Management
Brower Student Center, room BSC-210
3:40 PM - 4:30 PM

Abstract:

Over the last few decades, telehealth has emerged as another segment of the healthcare continuum. People are now able to gain more control over the care that is provided to them, because telehealth technologies allow people to monitor and report the data that is collected to their healthcare providers. It is the providers of healthcare who then interpret the results and take the necessary action. This study observed how the provision of a wireless activity tracker influenced the conscious health attitudes and health behaviors of a sample of elderly participants residing in an assisted living facility. This study focuses on the attitudes of the participants, as determined by a self-report, before and after the eight-week telehealth program. Data was collected in regards to weight, blood pressure, as well as daily steps taken, calories burned, and distance travelled to see if there was a correlation between activity, weight, and blood pressure. This small pilot was developed to better understand the efficacy and outcomes of introducing wireless activity trackers to a larger telehealth program with older adults. The hope is to further enhance primary prevention efforts in the elderly.

Biography:

Jose Lebron is a senior nursing major at Pace University from Peekskill, NY. He has been highly active on campus by taking up various positions such as tutor and was President of an honor society. He wishes to become a Chief Nursing Officer (CNO) of a major hospital, one day. He has been able to maintain his focus on his school work

while working and helping out his parents. Jose enjoys running in half-marathons and Spartan Races.

Biography:

Kimberly Escalante is an honors nursing student at Pace University. It is her dream to become a nurse and to help as many people as possible. She is a proud Pace University student and is honored to represent her school whenever she can. She hopes to do many more projects for her community.

Biography:

Jean F. Coppola Holds a BS in CS, MS in Telecom, MS in CS, and PhD in Computing Technology in Education with 19+ yrs experience in Academic Computing/Information Technology. Dr. Coppola has 80+ presentations in service-learning, intergenerational computing, smart e-classrooms, gerontechnology, & critical thinking while publishing 30+ articles. She has also advised student teams winning the NY Campus Compact Carter Academic Service Entrepreneur in recognition of service-learning excellence. Current research focuses on service-learning/civic engagement and gerontechnology. Since 2005, has worked with a research team studying the effect of technology on older adult life quality, attitudes towards aging, cognitive functioning, and student attitude change towards elderly via a service-learning intergenerational computing program where outcomes have led to awards including: American Society of Aging MetLife MindAlert Award for Mental Fitness Program; Isabel Brabazon Award for Evaluation and Research in Intergenerational Programs; Women: Builders of Communities and Dreams; and Jefferson Award for Public Service.

The Growing Threat of Malware and Data Theft
Joseph Gentile

Track: Cloud & Security
Brower Student Center, room BSC-202W
3:40 PM - 4:30 PM

Abstract:

The threat of information theft and the spread of malware is quickly becoming a very serious concern. While most forms of malware present themselves as annoying ads and popups, some types of malware

can cripple a company's ability to do business. In extreme cases malware can cause irreversible data loss and theft. The purpose of this research is to illustrate the growing threat of malware and data theft and provide a possible, low cost solution to this problem. One does not need to go far to read or listen to cyber attacks stealing information. The same can be said in any office building; it is more than likely that someone has malware infecting their computer. The biggest question that comes from this is; what is the most cost effective wave to take preventative measures. A possible and cost effective solution to combat malware would be to use a WIM PE set up on an external hard drive.

Biography:

My name is Joseph (JJ) Gentile and I am a second semester senior at Pace University. I am an Information Technology major with a concentration in cyber security. Although I am graduating in December of 2014, I plan on attending graduate school at Pace with a focus in Internet Technology. I am originally from Mahopac, NY. Although I have a passion for computers, I do enjoy going fishing whenever possible.

Abstracts & Biographies – Saturday

10:15 AM – 11:10 PM Presentation

Software Development Apprenticeships: Closing the Skills Gap by Investing in Potential
Kyle Thomas & Catherine Jaros

Track: IT-PC
Education Building, room ED-211
10:15 AM - 11:10 AM

Abstract:

Finding technology talent is one of the more difficult aspects of growing a technology department. Surveys suggest as much as 95% of hiring managers have difficulty filling open positions. In competitive markets, talented developers generally have multiple offers at any given time and it is a "seller's market" from their point of view. New developers can require significant training in the tools and processes of the trade. Many leave school never having used tools such as version control and haven't written code

that needs to not just give correct output but must also be maintainable. While there is an apparent shortage of developers, there is no shortage of people excited to learn the skills to start a new career in programming as evidenced by the growing popularity of development bootcamp type programs.

In our presentation we introduce the apprenticeship model as a method of filling software development positions. Our program uses short talks and challenging exercises, coupled with highly available mentors and actual production projects to train developers in the tools and processes our company uses. After only a short time the apprentices were able to begin contributing to projects and produce quality code that met our team's standards. The initial investment of time from senior developers was recouped by the availability of inexpensive, but high quality development hours for the duration of the program. We will discuss recruitment, curriculum design, implementation and results/future improvements.

Biography:

Kyle Thomas runs the software development department for Brighton Cromwell and is co-founder of EggZack.com. His current work focuses on the development and implementation of processes and technologies that improve the software development process. He graduated from the University of Delaware in 2012 with degrees in physics and chemical engineering. Kyle has done research on highly distributed computing, computational pharmacokinetics and routing protocols. He has given talks and co-authored papers in the areas of computational physics, self-adaptive/self-organizing systems and swarm intelligence.

Biography:

Catherine Jaros is a Human Resources Generalist who solely runs the recently implemented Human Resources Department at Brighton Cromwell. She has years of diverse human resources and management experience working in the fields of healthcare, international and national staffing, retail and now the defense industry. Her areas of expertise include recruitment, onboarding, performance management, staff development, employment law, employee relations, compliance issues, unemployment and leaves of absence. She is a member of the National Society for Human Resources Management (SHRM) and is currently in pursuit of being certified as a Professional in Human Resources (PHR). Catherine is fluent in Polish and graduated Seton Hall in 2008 with a degree in English and minor in French, with a strong initial focus on Diplomacy and International Relation studies.

10:15 AM – 11:10 PM Presentation

Expressing HIPAA Legal Rules as Privacy Policies
Tariq Alshugran & Julius Dichter

Track: IT-PC
Education, room ED-211
11:20 AM - 12:15 PM

Abstract:

Healthcare software applications are designed to collect, store, and manage patients' personal and medical information. Such applications are required to maintain the patients' privacy and to comply with the privacy laws and regulations. In the United States, patients' privacy is protected with federal regulations, more specifically the Health Insurance Portability and Accountability Act (HIPAA) of 1996 and its amendments. To guarantee compliance with HIPAA, the software application must have a decision engine which should be consulted before any operation is carried on the patients' information to determine the operation validity and compliance. This decision engine will use HIPAA privacy rules in the decision making process which triggers the need to formally expressing HIPAA privacy rules in the form of formal privacy policies.

Biography:

Tariq Alshugran is a Ph.D. candidate of Computer Science and Engineering at the University of Bridgeport. He received his B.Sc. in Computer Information System from Jordan University of Science and Technology in 2004 and M.Sc. degree in Computer and Information Science from the University of Michigan in 2007. Tariq research interests lie in the broad area of Data Privacy, Data Modeling, Legal Software Systems and Case Management, Web Services and Service-Oriented applications.

Apart from research, Tariq is a Senior Software Engineer; architecting and implementing software system in the fields of Legal software systems, document and content management systems, and web applications.

Biography:

Julius Dichter is an Associate Professor in the department of Computer Science and Engineering at the University of Bridgeport in Connecticut. He received his M.S. degree from the University of New Haven and the Ph.D. from the University of Connecticut in the area of parallel computing optimization. His research interests include parallel and

distributed system performance, algorithms and object-oriented systems. Dr. Dichter is a member of IEEE, ACM, and ISCA.

12:25 PM – 1:20 PM Presentation

A New Breed of Spreadsheet Computing
Enzo Alda

Track: IT-PC
Education Building, room ED-211
12:25 PM - 1:20 PM

Abstract

When first introduced in the early 80s, spreadsheets played a critical role in the personal computing revolution. Today, 32 years after the debut of Visicalc on the Apple II, spreadsheets are still the tool of choice for many tasks. If we regarded spreadsheets as programming environments - which they are, from a theoretical perspective - the language of MS-Excel formulas would be considered the most popular programming language in the world. This is somehow unfortunate, because spreadsheets still have many fundamental shortcomings that have plagued them since inception, making them error prone and unsuitable for serious programming tasks, for instance: lack of functional abstraction, poor support for data structures, and lack of suitable validation systems. This talk demonstrates that it is possible, and desirable, to generalize spreadsheets by following commonly accepted principles in programming language design. Specific business cases, from various sectors, will be presented, showing how the resulting programming paradigm allows for a smooth learning curve transitioning from simple to advanced programming tasks. The talk will also show why spreadsheets naturally lend themselves to parallelization and are particularly suitable for analyzing and transforming data in real-time.

Biography:

Mr. Alda is the founder of Lakebolt Research, a technology incubator devoted to the development of real-time data analysis tools. Prior to founding Lakebolt Research, Mr. Alda worked at Google, contributing to the evolution of Google Spreadsheets, and Bloomberg LP, where he conceived and implemented the high performance interpreter that powers real-time calculations in the Bloomberg terminal. In 1998, Mr. Alda was awarded US patent 5,812,753 for his invention of the "instant RAID 5" initialization algorithm. Prior to coming to the United States, Mr. Alda was a university professor in Latin America, lecturing courses in

compiler construction and programming language design. He holds B.S. and M.S. degrees in Software Engineering and Computer Science respectively, as well as an MBA from The Wharton School of Business. Mr. Alda joined the IEEE in 1999.

1:30 PM – 2:25 PM Presentation

Investigating the Future of Mobile Cloud Computing
Zyad Nossire

Track: IT-PC
Education Building, room ED-211
1:30 PM - 2:25 PM

Abstract:

Mobile cloud computing is a concept that combines many fields of computing. The foundation of this computing is the need for the delivery of services, software over the internet to reduce cost, and increasing storage capacity. We have surveyed existing works in this mobile platform. We gave a definition by providing an overview of the particular models of mobile cloud applications, as far as highlighting the research challenges in this area including mobile cloud computing security. Our recommendations for mobile cloud computing explain better how cloud computing can help build more powerful applications.

Biography:

Mr. Zyad Nossire: received the B.Sc. in Management Information System from Al-Albyat University, Al-Mafrq ON, Jordan in 2006, and the MCA (Master of science information and Communication Technology) from Utara University – Malaysia in 2008. In 2012 Zyad Nossire joined University of Bridgeport as Ph.D. student in computer science and engineering at the University of Bridgeport, Connecticut-USA. From 2008-2009, Zyad Nossire was Assistant Lecturer in science and Technology Community College on Irbid - Al-Balqa Applied University-Jordan. From 2009 to 2011 Zyad Nossire joined Njran and Al-Emma Mohamed Ben Saoud University's –Saudi Arabia as assistant lecturer. Zyad Nossire research interest is in the general area of Cloud computing ,Mobile ,wireless communications and networks. My email addresses: znossire@bridgeport.edu,ziad.jo2009@yahoo.com

3:40 PM – 4:35 PM Presentations

Universal User Interface Design: Accessible Mobile Application Development for People with Visual & Physical Impairments

Martine (Tina) Nezerwa, Dr. Jean F. Coppola, Stefan Howansky, Keith Wright, Tony Chen, Jake Terranova & Jacob Fried-Stahl

Track: IT-PC
Education Building, room ED-211
3:40 PM - 4:35 PM

Abstract:

The information technology sector has over the last 20 years, experienced a boom in the number of users from all ages, backgrounds, and countries. The adoption of technology has always been well received by the younger population. Technology is rapidly changing, contributing to the older population sometimes being left behind and losing interest as applications get more complicated or transform too fast. In addition to the difficulty older adults face, there is also a growing number of the world's populations (young and old) diagnosed with different types of cognitive impairments and loss of dexterity conditions. However, there are few technologies (especially mobile applications) that have been developed with these groups of people in mind. The majority of current applications are developed for the general population forgetting that there is a growing group of users with various deficiencies. This presentation focuses on universal development of mobile applications for people with Multiple Sclerosis (MS), a disabling disease of the central nervous system that disrupts the flow of information within the brain, as well as between the brain and body. In addition to focusing on MS patients in the design and implementation of these mobile apps, an aim is also to raise awareness in the technology sector to developers and decision makers to universally design to include people with cognitive and physical impairments.

Biography:

Martine Nezerwa is a full time graduate student at Pace University Seidenberg School of Computer Science and Information Systems pursuing her masters degree in Telecommunications and Network systems. She is set to graduate in 2015. Since her childhood, she has been fascinated and interested with technology especially computer technologies. Aside from being a full-time student, she is also a Graduate Assistant working with the Information Technology and a student assistant at the Pace University English Language Institute. She is one of the co-founder of Rwandan's for Water, a non-profit organization that drills

water wells in rural areas in her country Rwanda. With an undergraduate degree in Computer Engineering, Martine's career goal is to work as a network/software engineer for telecommunication companies like Samsung, in Korea and software companies such as Google.

Biography:

Jean F. Coppola Holds a BS in CS, MS in Telecom, MS in CS, and PhD in Computing Technology in Education with 19+ yrs experience in Academic Computing/Information Technology. Dr. Coppola has 80+ presentations in service-learning, intergenerational computing, smart e-classrooms, gerontechnology, & critical thinking while publishing 30+ articles. She has also advised student teams winning the NY Campus Compact Carter Academic Service Entrepreneur in recognition of service-learning excellence. Current research focuses on service-learning/civic engagement and gerontechnology. Since 2005, has worked with a research team studying the effect of technology on older adult life quality, attitudes towards aging, cognitive functioning, and student attitude change towards elderly via a service-learning intergenerational computing program where outcomes have led to awards including: American Society of Aging MetLife MindAlert Award for Mental Fitness Program; Isabel Brabazon Award for Evaluation and Research in Intergenerational Programs; Women: Builders of Communities and Dreams; and Jefferson Award for Public Service.

Biography:

Stefan Howansky currently is a full-time student at Pace University. He is currently enrolled in the Seidenberg School of Computer Science and Information Systems in hopes to obtain his Bachelor of Science degree in Computer Science. He spends the majority of his free time learning about the Android mobile operating system as well as training Brazilian Jiu Jitsu. Stefan currently works part time at Education Media. This job allows him to become more acquainted to the hardware aspects of computers. Stefan aspires to become a software engineer for Google or become an independent mobile application developer. His love for computers grows daily.

Biography:

Keith Wright is a full-time student studying at Pace University's Seidenberg School of Computer Science and Information Systems with the goal of obtaining a Master's degree in Computer Science. Keith currently works part-time in Pace University's User Services department performing web and graphic design services. In addition to being an IEEE and ACM member, Keith is a registered member and developer with Microsoft. Prior to enrolling at Pace, Keith previously worked with international missions as well as volunteering at local, non-profit

organizations performing web design and technology training.

Biography:

Tony Chen is an undergraduate computer science student in the Seidenberg School of Computer Systems and Information Technology at Pace University. Tony is pursuing a BS and his expected date of graduation is May 2015. Tony is a research assistant for the Gerotechnology Program, a collaborative interdisciplinary research initiative between the Lienhard School of Nursing and the Seidenberg School of Computer Systems and Information Technology at Pace University.

Biography:

Jake Terranova is currently a student enrolled in Pace University's Seidenberg school of Computer Science. He hopes to attain his Bachelor of Science degree in 2017, and eventually put his degree towards software or game development. Currently, he spends his free time learning about various programming languages and how he can use them in his own projects. At the moment, he focuses primarily on learning about Java, C and the android SDK to help his team further develop their app. On top of this, he also works at Educational Media which allows for him to have a more firm grasp on the hardware side of things.

Biography:

Jacob G. Stahl is a full time student at Pace University on the New York City campus. He is also currently enrolled in Seidenberg School of Computer Science and Information Systems in hopes to obtain a BS in Computer Science and a minor in mathematics in 2016. Mr. Stahl is currently working for a medical software company as a support engineer and aspires to be head programmer. He has been using computers since he was 4 years old. Jacob's goal is to work at Valve Systems and become a video game designer. In his free time, Jacob likes tinkering with robots.

ITPC and TCF Wireless User Instructions

Configure your wireless software to access the `Guest-at-TCNJ3` wireless network (a.k.a. SSID). Some wireless software won't show unencrypted wireless networks by default so you may need to manually enter the name. Also note that the name is case sensitive.

Once you are connected and associated with the guest wireless network, launch a web browser and try accessing any website. Your browser should be redirected to the wireless login page. If not, try clicking your browser's reload/refresh button.

Once you see the login page, enter the following login and password to gain access to the Internet.

> Guest Username: guest1030
> Guest Password: 5ugaju2y

After successfully logging in, you will be redirected to the page that you originally requested. You should now have access to the Internet.

This account is active from Fri, Mar 20, 2015 12:00am to Sun, Mar 22, 2015 11:59pm.

To view campus WiFi locations, visit http://nts.pages.tcnj.edu/campus-network/wireless/schedule-locations/.

Please contact the Help Desk at 609/771-2660 or helpdesk@tcnj.edu if you need further assistance.

NOTE: No wireless encryption is used on the guest network. You should use encrypted protocols such as HTTPS, SSL or SSH when accessing sensitive information over this wireless network.
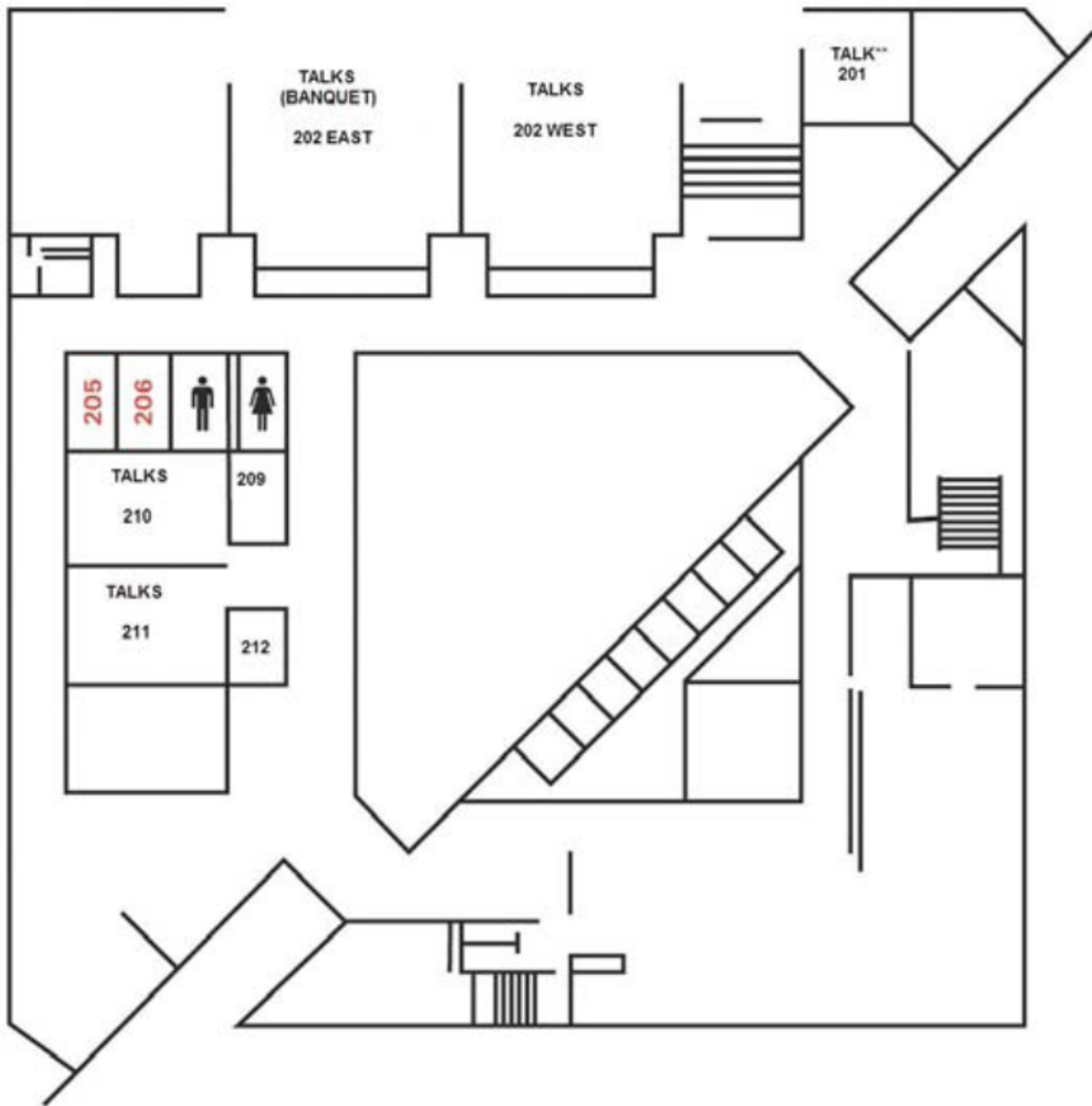
TCNJ Campus Map
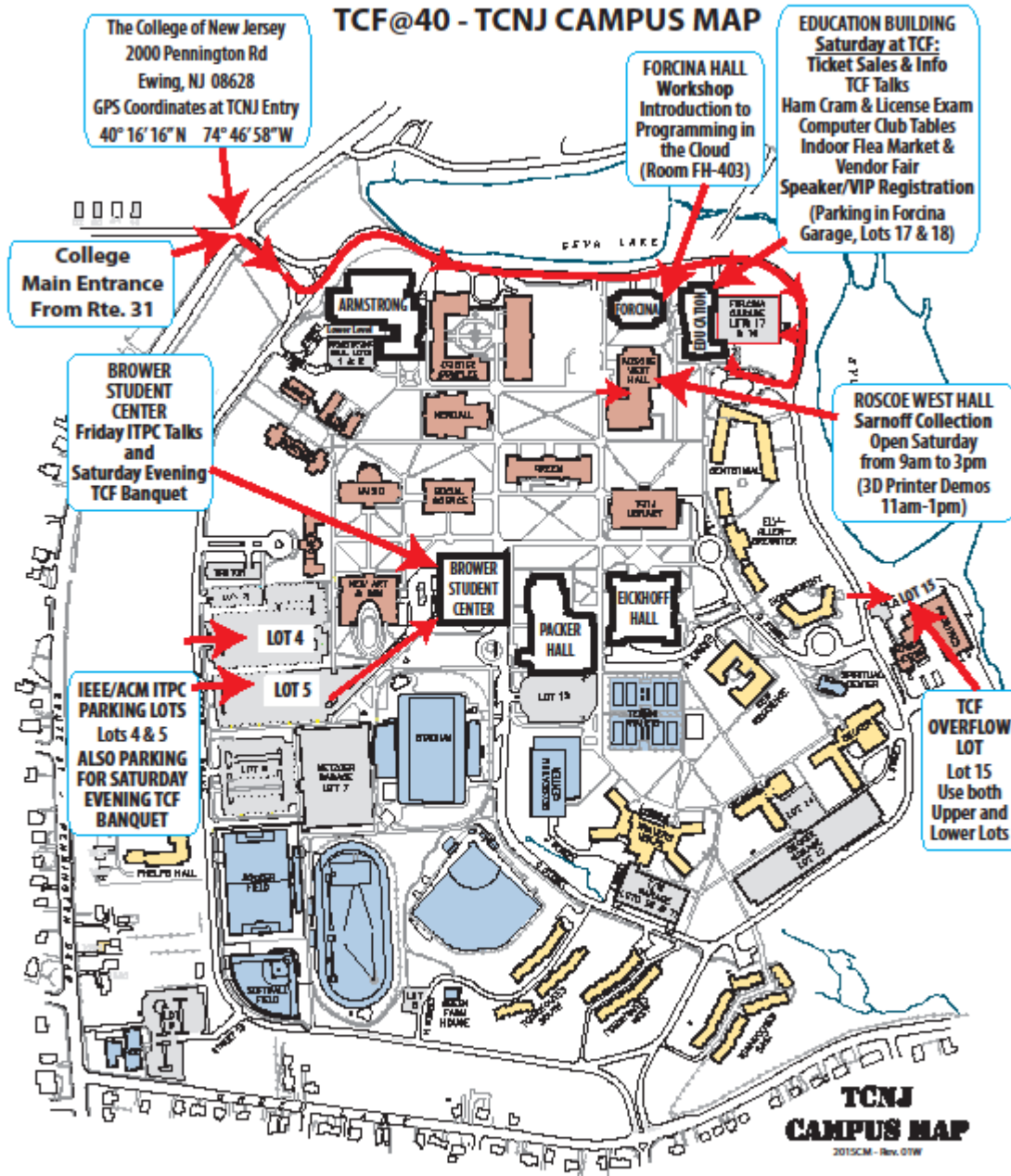
2015 TRENTON COMPUTER FESTIVAL
TCF@40 - TCNJ CAMPUS MAP

BSC - Brower Student Center – 2nd Floor
Talks & Forums

The 2015 TCF Agenda Grid

TCF Twitter: #tcf and #tcf2015

Subject to last minute changes

ED = New Education Building   RWH = Roscoe West Hall   FH = Forcina Hall   BSC = Brower Student Center

Satur-day	Microsoft (ED-115)	IT-PC (ED-211)	Computer Business (ED-209)	Applications (ED-206)	Games & Technology (ED-207)	Education & STEM (ED-206)	Technology & Hardware (ED-113)	History of Computing (ED-112)	App Dev/History (ED-109)	Arduino Workshop (ED-107)	OOP University (ED-105)	Amateur Radio (ED-103)	Exhibits (ED & RWH)
10:15am to 11:10am	Bitcoin Currency for the Future or the Past? D. Lee	Software Development and Apprenticeships K. Thomas & C. Jaris	Naming Structures for Improved Digital Organization J. LeMaster	Workshop Introduction to Programming in The Cloud	GPS Secrets Updated C. Lewer	Getting Started in Cell Phone/Tablet Digital Photography R. Hintz	Satellite Reception Made Easy M. Fliss	Eighty Years of Computer Hobbyists E. Kizlarz	Workshop on Developing Apps for Android B. Burd	Introduction to Arduino (Presentation)	Introduction to OOP Design Principles S. Jenkins	Ham Cram 101 Ham Radio License Exam Preparation Cram Course	**Special Exhibits and Demos** — 3D Printer & Design Demos by IEEE-PCJS from 11:00am to 1:00pm in RWH-2nd floor
11:20am to 12:15pm	Workshop on Keeping Your Computer Bug Free & Tune up R. Kramer	HIPAA Legal Rules T. Aknsum	Stock Market Timing Using Neural Networks D. Ferxson	R DePasquale "In FH-403" (Forcina Hall Computer Lab)	TCF850 A. Katz	Updated Guide to Best Web Sites & Search Engines E. Kadan	How to Build a Scalar Network Analyzer G. Heron	ENIAC and the First TCF Keynote Speech E. Kizlarz	Introduction to the Vintage Computing Hobby J. Brice	Hands-On with Arduino	Getting Started with C++ S. Jenkins	Ham Cram Session begins at 9:00am and goes to 12:30pm	Quadcopter Demo
12:25pm to 1:20pm	New Breed of Spreadsheet Computing E. Arata	Internet Job$$$ D. Hsu	Invention Patents and Manufacturing M. Stewman	Get Started in Home Automation N. Cherry	Ralph Baer - Inventor of the Home Video Game S. Meshel	Workshop on Creating Real-Time Streaming Live Video Q. & M. Rivera	Two Raspberry PI Tutorials and Demos J. Nissen	Workshop Fixing Broken Vintage Computers G. Cohen		Limited Spaces Bring Your Laptop	Advanced C++ S. Jenkins	Practice Exam given at 1:30pm	Digital Photo Exhibit
1:30pm to 2:25pm	Microsoft Office in 2015 D. Soll	Future of Mobile Cloud Computing Z. Nezaire	What's Your Data Strategy S. Kreinajee	Social Media Opportunities D. Hsu	Evolution of Console Computer Games R. Anton	Google Gadgets B. Burd		Always to the iPhone E. Kisarez		Arduino on the Network	Getting Started with Java K. Pimple	Walk-in Real Exam given at 3:40pm	Historic Computers from MARCH Club
2:35pm to 3:30pm			**Featured Keynote Speaker: Dan Rosenbaum, Technology Journalist, Wearable Tech Insider, will talk on "Approaching Singularity" in Room ED-115**										Tour the Sarnoff Museum of Historic Technology (9am-3pm RWH)
3:40pm to 4:35pm	Introduction to Windows 10 D. Soll	User Interface for the Physically Impaired J. Carpenter et al		Robotics: An Introduction S. Kim	Games, Intelligence, Consciousness & the Turing Test S. Meshel	LEGO MINDSTORMS Robotics D. Ferguson	Computer Anamorphic Art W. Sherman	Restoring Vintage Electronics J. Allen	MITS Altair 8800 C. Cohen	Before Computer Drafting R. Bergman	Advanced Java K. Pimple	Conducted by the David Sarnoff Radio Club www.w2e.org	

WiFi Connect: SSID: Guest-at-TCNJ3   Password: 5ugaju2y
Login: guest1030   Password: 5ugaju2e

EDUCATION BUILDING - FIRST FLOOR

EDUCATION BUILDING - SECOND FLOOR

2015 TRENTON COMPUTER FESTIVAL
TCF@40 - TCNJ CAMPUS MAP

The College of New Jersey
2000 Pennington Rd
Ewing, NJ 08628
GPS Coordinates at TCNJ Entry
40°16'16"N 74°46'58"W

College Main Entrance From Rte. 31

FORCINA HALL Workshop Introduction to Programming in the Cloud (Room FH-403)

EDUCATION BUILDING Saturday at TCF: Ticket Sales & Info; TCF Talks; Ham Cram & License-Exam; Computer Club Tables; Indoor Flea Market & Vendor Fair; Speaker/VIP Registration (Parking in Forcina Garage, Lots 17 & 18)

BROWER STUDENT CENTER Friday ITPC Talks and Saturday Evening TCF Banquet

ROSCOE WEST HALL Open Saturday from 9am to 3pm (3D Printer Demos 11am-1pm)

IEEE/ACM ITPC PARKING LOTS Lots 4 & 5 ALSO PARKING FOR SATURDAY EVENING TCF BANQUET

TCF OVERFLOW LOT Lot 15 Use both Upper and Lower Lots

TCNJ CAMPUS MAP