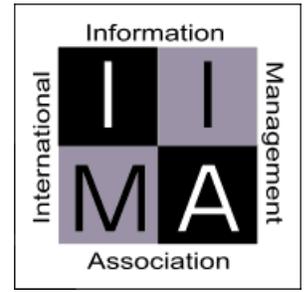




International Information Management Association 27th Annual Conference IIMA2016 Taipei, Taiwan



Tentative Program subject to changes

September 17th, Saturday

Travel to Taichung-See additional information Cost extra

September 18th, Sunday

Travel back to Taipei after tours

Evening Reception in Taipei

Tba

Conference Hotel: Grand Hotel Taipei

(all meetings during the day located there)

September 19th, Monday

Morning Workshops-8:30am – 12:30

**Enabling AI on Mobile Devices, from IBM Watson Research Center-New York
How to Attack Android in 10 Seconds or Less: Attacks and Protections for Mobile
Clinical Informatics: What is it and how useful is it?**

Lunch

Afternoon 2:30-4:30

Opening Ceremonies

Keynote Addresses

Vincent Sritapan

Mobile Security Threats and Vulnerabilities

Program Manager, Cyber Security Division, Department of Homeland Security, US

Mobile Security Research and Development Projects

TBA

Evening Reception

tba

September 20th, Tuesday

Moring, 8:30-12:00

Presentation of Abstracts

Lunch

Afternoon, 2:00-4:30

Presentation of Abstracts

Evening Dinner

September 21th, Wednesday

Morning, 8:00

Business Meeting

9:30

Tours

Business & Siteseeing

End of conference by 5:00

Keynote Speakers

Vincent Sritapan



Mobile Security Threats and Vulnerabilities

Keynote Description: He will brief us on the threats that we know of and the evolution of vulnerabilities to mobile technology. He will discuss the Department of Homeland Security's Mobile Security Research and Development programs and how they are addressing the threat.

Keynote Presenter: Vincent Sritapan is a Program Manager in the Cyber Security Division (CSD) for the Homeland Security Advanced Research Projects Agency at DHS S&T. Mr. Sritapan oversees the Mobile Security Research and Development (R&D) projects aimed at accelerating the adoption of secure mobility for the Department, government and global community to ensure the homeland security mission. Prior to joining CSD, Vincent spent three years with the Department's Office of the Chief Information Security Officer as the Technical Lead and Component Coordinator in the Information Security Architecture and Engineering Division. He holds a BS in Information Systems from California State University Northridge, an MA in National Security Studies and an MBA in Information Assurance and Security Management from California State University San Bernardino. Mr. Sritapan teaches cyber as an Adjunct Assistant Professor at the Northern Virginia Community College and is a direct commissioned Information Professional Officer in the United States Navy Reserve. He is a National Science Foundation CyberCorps Scholarship for Service Alumnus and an Office of the Director of National Intelligence - Intelligence Community Scholar Alumnus. He was recently selected as one of the Top 100 Federal Employees for 2016 by the FCW Magazine: The Business of Federal Technology.

Additional Information Workshops

Workshop 1

Enabling Artificial Intelligence on Mobile Devices

IBM Corporation-Watson Research Center-New York, USA

Workshop Description: Your iPhone is becoming smarter and smarter. But, can it be a device that recognizes the environment, understands your behavior, reasons what its camera is seeing, advises you when you may be in security breach, and assists you on autonomous tasks such as driving? In this workshop, we will discuss the technical challenges and solutions to create cognitive computing and application analytics security mechanisms on mobile devices, especially on iPhone and iPad.

Presenter: Dr. Ching-Yung Lin is the Chief Scientist, in the area of Graph Computing, in IBM Corporation. He is also an IBM Distinguished Researcher and the Head and Senior Manager of the Department of Network Science and Machine Intelligence at IBM Watson Research Center. Dr. Lin joined IBM Research in 2000. He has been also an Adjunct Professor in the Departments of Electrical Engineering and Computer Science in Columbia University since 2005, and was an Affiliate Associate Professor in the University of Washington 2003-2009 and an Adjunct Professor in NYU in 2014. His research direction is mainly on large-scale multimodality signal understanding, network graph computing, artificial intelligence, machine learning, and computational social & cognitive sciences. Since 2011, he has been leading a team of more than 40 Ph.D. researchers in worldwide IBM Research Labs (Watson, Almaden, Cambridge, Austin, India, China, Brazil, Australia, etc) and more than 20 professors and researchers in 9 universities (Northeastern, Northwestern, Columbia, Minnesota, Rutgers, CMU, New Mexico, USC, and UC Berkeley). He leads IBM System G, a complete Graph Computing Suite for the future of network science and artificial intelligence. He is an author of 160+ papers and 23 awarded patents, with 8,600+ citations. His team won more than 10 best paper awards, including ACM CIKM 2012 and IEEE BigData 2013. His work was previously reported by BusinessWeek 4 times, including being the Top Story of Week in 2009. In 2010, he was selected by IBM Research as one of the researchers "mostly likely to have the greatest scientific impact for IBM and the world." Dr. Lin is an IEEE Fellow since 2011 and was fellow cited for the contribution to Network Science. He is also an IEEE Distinguished Lecturer since 2015.

Presenter: Dr. Marco Pistoia is a Distinguished Researcher and Senior Manager on Mobile Technologies at the IBM Thomas J. Watson Research Center in New York. In January 2010, he was among the 38 IBM researchers worldwide to be bestowed the title of IBM Master Inventor. He is the inventor of 115 patents and 171 patent applications. Dr. Pistoia received a Ph.D. in Mathematics from New York University in 2005. He has lectured at numerous universities worldwide, written 10 books, and published extensively on various aspects of Program Analysis, Language-based Security and Mobile Computing. In the course of his career, he received three ACM Distinguished Paper Awards (2007, 2011 and 2014). In 2007, the Italian Ministry of Education, University and Research, the National Committee of the Italian Presidents of Faculties of Sciences and Technologies, and Confindustria (Italy's leading organization representing all the Italian manufacturing and service companies) presented Pistoia as one of the 70 most successful mathematicians who graduated from an Italian university between 1980 and 2000.

Presenter: Dr. Larry Lai is a research scientist in IBM T.J. Watson Research Center since 2013. His current research interests include real-time computer vision and mobile signal analytics. Currently, one of his research works is to conduct deep learning running on mobile devices. Larry received his Ph.D. degree from the Graduate Institute of Electronics Engineering, National Taiwan University (NTU), Taipei, Taiwan, in 2011. From 2007 to 2011, he was a project leader in Yotta-Labs, an IC design house in Taipei, where he was involved in designing the algorithm and hardware acceleration of vision-based object tracking, face detection, and recognition on mobile devices. From 2011 to 2012, he was a Post-Doctoral Fellow with the Graduate Institute of Networking and Multimedia, NTU, where he proposed the adaptive video content to improve the viewing experience of sports videos on mobile devices.

Workshop 2

How to Attack Android in 10 Seconds or Less:

Attacks and Protections for Mobile Apps

Kryptowire, Inc.—Virginia, USA

Workshop Description: We present the implementation and impact of a wide-range of novel targeted Denial of Service (DoS) attacks on Android devices that are persistent across all recent Android platform versions. The DoS attacks can be selectively focused on denying access to device resources including microphone and camera, preventing the installation of applications, making the device unresponsive, targeting and terminating other running applications and processes, and causing a reboot cycle. To make matters worse, the attacks can be launched through regular apps that do not require a rooted device or any permissions with the exception of the attacks on the microphone and camera resources that require simple access rights.

As part of our proof-of-concept attacks, we were able to render the Sony Bravia XBR-43X830C Android TV and the Amazon Fire TV Stick 1st generation devices permanently unusable. In addition, other devices, including the Moto 360 1st generation smart-watch, required flashing firmware images, whereas the Nvidia Shield Android TV and the Amazon Fire 7" Tablet required a factory reset to recover. Our attack is applicable to most Android devices and requires manual intervention to attempt to recover the device. The proposed attack strategy is more debilitating to devices that do not provide means for the end-user to easily access safe mode, recovery mode, or the ability flash firmware images. To mitigate the attack, we created an open-source defense application that has a 100% prevention rate after a single soft re-boot of the device while incurring less than 1.6% performance overhead. In addition, we will show how application vetting using standards can detect mobile applications that can cause harm to an Enterprise or large organization.

Presenter: Mr. Ryan Johnson, Kryptowire's Research Director is a senior software engineer working with Kryptowire LLC. Mr. Johnson has software engineering background and has developed many prototypes and is the author of numerous research publications on the topics of application security and detection of malware. Mr. Johnson holds a BSc in IT and MSc. in Information Security and Assurance from George Mason University and he is working towards a PhD. in Information Security and Assurance at George Mason University. His research

interests are software dynamic analysis, mobile application security, and reverse engineering. Ryan has presented at academic conferences and Black Hat Asia 2015. As part of his research efforts he has discovered and reported security issues to various Android device manufacturers.

Presenter: Dr. Angelos Stavrou is a founder and president of Kryptowire. Stavrou has served as principal investigator on contracts from NSF, DARPA, IARPA, DHS, AFOSR, ARO, ONR, and he is an active member of NIST's Mobile Security team and has written more than 80 peer-reviewed conference and journal articles. Stavrou received his M.Sc. in Electrical Engineering, M.Phil. and Ph.D. (with distinction) in Computer Science all from Columbia University. He also holds a M.Sc. in theoretical Computer Science from University of Athens, and a B.Sc. in Physics with distinction from University of Patras, Greece. His current research interests include security and reliability for distributed systems, security principles for virtualization, and anonymity with a focus on building and deploying large-scale systems. Stavrou was awarded with the 2012 George Mason Emerging Researcher, Scholar, Creator Award, a university-wide award. In 2013, he received the IEEE Reliability Society Engineer of the Year award. He is a NIST guest researcher, a member of the ACM and USENIX, and a senior IEEE member.

Workshop 3

Clinical Informatics: What is it and how useful

Board Certified Physician in CI, Texas, USA

Workshop Description: What is Clinical Informatics? How is it changing medicine and healthcare practitioners and workers? Information Technology has changed modern medicine, however, the claim that it is cost effective, efficient and safer for patients is not necessarily true. Failures in policy, procedures, and processes have lead to implementation challenges that risk the lives of patients. Clinical Informatics is the field of study that focuses on successful integration of business, medicine, and technology. Understanding clinical informatics is key to using technology in a meaningful manner, which will lead to coordinated efforts in policy, procedures and implementation processes.

Presenter: Dr. B.W. Trevor Rohm, MD MS is the Chief Medical Officer of the Hardeman County Memorial Hospital. He holds BS and MS degrees in Computer Science from Brigham Young University, earned his MD from St. George's University, and completed an internship and residency in Family and Community Medicine at the University of New Mexico. Fellowship and training in Biomedical Informatics was completed at the University of New Mexico and Oregon Health Science University. He is Board Certified in Family Medicine, through the American Board of Family Medicine, and was among the first group of physicians to be Board Certified in the field of Clinical Informatics through the American Medical Informatics Association. He has published a dozen articles in the field of informatics, and continues to practice inpatient medicine, serves as the Trauma Director of the Emergency Department, and carries a full clinical practice.

Additional Information Extra Tours

These tours are not covered in your Registration fees, these are additional.

September 17th, Saturday

Travel to Taichung, Taiwan

Cost: \$50 plus expense of High Speed Rail (HSR) from Taiwan to Taichung, about \$24 one way and hotel (\$97).

Activity: Visit to a business there and then to a tourist place, Sun Moon Lake. All day.

Contact: Dr. Tzoung-Ru Lee (trlee@dragon.nchu.edu.tw) for details of when to arrive and where to meet

September 18th, Sunday

Travel back to Taipei after tours

Cost: \$50 plus expense of HSR from Taichung to Taiwan, about \$24, for evening Reception at Grand Hotel

Activity: Visit to a business there and then to a tourist place, Mount Ali and a Tea Room.

Contact: Dr. Tzoung-Ru Lee (trlee@dragon.nchu.edu.tw) for details of when to arrive and where to meet.