

The 5th Biannual

# CYBER SECURITY SUMMIT

April 25, 2018  
UC Santa Cruz

UNIVERSITY  
OF  
CALIFORNIA



# AGENDA

All summit sessions will be held in the UC Santa Cruz Cowell Ranch Hay Barn.

## 8:00-9:00 AM

**Breakfast & Check-in**

## 9:00-9:15 AM

**Welcome**

DAVID RUSTING, SYSTEMWIDE CHIEF  
INFORMATION SECURITY OFFICER, UCOP

## 9:15-10:00 AM

**Keynote: How Worried Should We Be?**

BRYAN CUNNINGHAM, EXECUTIVE DIRECTOR OF  
CYBERSECURITY POLICY & RESEARCH INSTITUTE, UCI

Cutting through the hype, Cunningham will give a sober and realistic assessment of the cybersecurity threat environment over the next 10 years. He will combine several macro trends with recent legal, technological, national, and economic security developments, putting together the “big picture” to set the stage for the conference.

## 10:00-10:45 AM

**From Prevention to Protection: Data as the New Security Perimeter**

MITCHELL GREENFIELD, MANAGER OF ENTERPRISE  
INFORMATION PROTECTION, HUMANA

With the rise of cloud and mobile, organizations must shift from a prevention to a protection model. In the modern IT environment, security must seamlessly follow data as it travels from on-premises environments to multiple cloud environments. With a data protection model, companies treat data as the new perimeter. In this session, Greenfield will share how he implemented a three-phase cloud security project that helps companies enforce contextual security policies based on the content, device, and user.

## 10:45-11:00 AM

**Break**

## 11:00-11:45 AM

**Cybersecurity Practices for Wearable Medical Devices**

DAVID KLONOFF, CLINICAL PROFESSOR, UCSF

Connected medical devices are a key pivot point for cyber attacks. Threats to the accurate flow of medical information and commands may compromise the safe function of these devices. Medical cybersecurity breaches can put users at risk of health complications and disclosure of protected health information. Hospitals that collaborate will be best able to reduce cyber risks. Dr. Klonoff will present a blueprint for sound cybersecurity practices for hospital devices and wearable/implantable medical devices.

## 11:45-1:15

**Networking Lunch**

## 1:15-2:00 PM

**Engagement Activity: Cooperation and Trust for Information Security Teams**

ASHWIN MATHEW, VISITING SCHOLAR, UC BERKELEY CENTER  
FOR LONG-TERM CYBERSECURITY

Information security is defined by a fundamental dilemma: to secure information, we must share information. This dilemma can be addressed by ISACs, CERTs, and other institutions in order to ensure that information about new threats is securely shared across organizational boundaries. However, such information sharing equally takes place over social trust relationships. In this talk and activity, Mathew will draw from his research to illustrate the role of social trust for cooperation in information security.

## 2:00-2:45 PM

**Balancing Educational Access and Cybersecurity**

OMID POURZANJANI, VISITING VICE CHANCELLOR FOR  
TECHNOLOGY, RESEARCH, AND INFORMATION SYSTEMS, CCCCC

California Community Colleges have over two million current students in our colleges. Tracking the progress of our students from recruitment to completion is absolutely necessary to determine where the gaps and barriers are. Additionally, a continuous series of legislated demands for tracking and reporting information regarding our students increases the quantity of our data. Dr. Pourzanjani will share existing practices for onboarding, tracking, and supporting students, discuss various data collection mechanisms and storage strategies, and share solutions for safely keeping data moving in support of our mission.

## 2:45-3:00 PM

**Break**

## 3:00-3:45 PM

**Secure Algorithms for Cyber-Physical Systems**

RICARDO SANFELICE, DIRECTOR OF CYBER-PHYSICAL SYSTEMS  
RESEARCH CENTER, UCSC

Cyber-physical systems offer open and physically accessible interfaces on both their cyber side and their physical side. Adversaries can exploit these interfaces to initiate actions to adversely affect the outputs or cause physical damage. Typical security methods for cyber-physical security rely on purely cyber mechanisms or on anomaly detection techniques based on simple representations of the physical dynamics. In this talk, Sanfelice will explain why it is critical to protect the physical components of such systems and introduce a model-based algorithm to detect recurrent attacks both in the cyber and physical components of the system.

## 3:45-4:00 PM

**Wrap-up**

DAVID RUSTING, SYSTEMWIDE CHIEF  
INFORMATION SECURITY OFFICER, UCOP

## SPEAKERS



### Bryan Cunningham

EXECUTIVE DIRECTOR OF  
CYBERSECURITY POLICY &  
RESEARCH INSTITUTE, UCI

As the first Executive Director of UCI's multidisciplinary Cybersecurity Policy & Research Institute, Cunningham is focused on solution-oriented strategies that address technical, legal, and policy challenges to combat cyber threats, protect individual privacy and civil liberties, maintain public safety, enhance economic and national security, and empower Americans to take better control of their digital security.

Cunningham is a leading international expert on cybersecurity law and policy, a former White House lawyer and adviser, and a media commentator on cybersecurity, technology, and surveillance issues. He has appeared on Bloomberg, ABC, CBS, CNN, FOX, and other networks.



### Mitchell Greenfield

MANAGER OF ENTERPRISE  
INFORMATION PROTECTION,  
HUMANA

As Manager of Enterprise Information Protection at Humana, Greenfield is constantly exploring the latest threats to corporate data. In the past, he has spoken about third-party threats related to the partner ecosystem and acquired companies. These threats have become a top priority in recent years following high-profile incidents at companies like Target. As a long-time member and regional board member of the ISACA organization, Greenfield has been on the cutting edge of industry education and knowledge sharing.



### David Klonoff

CLINICAL PROFESSOR, UCSF

David C. Klonoff, M.D. is an endocrinologist specializing in diabetes technology. He is Medical Director of the Dorothy L. and James E. Frank Diabetes Research Institute of Mills-Peninsula Medical Center in San Mateo, California and a Clinical Professor of Medicine at UCSF. Dr. Klonoff received an FDA Director's Special Citation Award in 2010 for outstanding contributions related to diabetes technology. In 2012, he was elected as a Fellow of the American Institute of Medical and Biological Engineering (AIMBE) and cited as one of the top 1000 bioengineers in the world, as well as among the top 2% of the world's bioengineers for his engineering work in diabetes technology. He received the 2012 Gold Medal Oration and Distinguished Scientist Award from the Dr. Mohan's Diabetes Specialties Centre and Madras Diabetes Research Foundation of Chennai, India. Dr. Klonoff was invited to participate in the White House Health and Cybersecurity Roundtable in 2015 and to speak at the European Parliament in 2010. He is the Founding Editor-in-Chief of the Journal of Diabetes Science and Technology and has authored over 260 publications.

## SPEAKERS



### Omid Pourzanjani

VISITING VICE CHANCELLOR,  
CALIFORNIA COMMUNITY COLLEGES  
CHANCELLOR'S OFFICE

Dr. Omid Pourzanjani served the community college mission at Golden West College for more than 23 years prior to joining the Chancellor's Office in 2017. During his time at Golden West College, he held positions as a professor, department chair, senate officer, instructional dean, chief student services officer, and chief instructional officer. Concurrent to these experiences, Dr. Pourzanjani served in executive leadership positions in high-tech multinational companies focused on organizational efficiency through business process re-engineering and information technology solutions.

In his new role as Visiting Vice Chancellor, he plans to work with all California Community Colleges stakeholders to improve integration between multiple technology solutions, processes, and practices in order to better guide students on their educational journey.

Dr. Pourzanjani received his bachelor's and master's degrees in computer science and engineering from California State University, Long Beach and his doctorate in education from University of California, Los Angeles. However, he credits his earlier degrees, his Career Education certificate and associate's degree from Santa Monica College, with enhancing his income-earning opportunities and starting him on his professional career path.



### Ricardo Sanfelice

ASSOCIATE PROFESSOR OF  
COMPUTER ENGINEERING, UC  
SANTA CRUZ

Ricardo G. Sanfelice received his master's and doctorate degrees in 2004 and 2007, respectively, from the University of California, Santa Barbara. In 2007 and 2008, he was a Postdoctoral Associate at the Laboratory for Information and Decision Systems at the Massachusetts Institute of Technology and visited the Centre Automatique et Systèmes at the École de Mines de Paris for four months. Professor Sanfelice is the recipient of the 2013 SIAM Control and Systems Theory Prize, the National Science Foundation CAREER award, the Air Force Young Investigator Research Award, the 2010 IEEE Control Systems Magazine Outstanding Paper Award, and the 2012 STAR Higher Education Award for his contributions to STEM education. He is Associate Editor for Automatica and serves as Chair of the Hybrid Systems Technical Committee from the IEEE Control Systems Society. He is Director of the Cyber-Physical Systems Research Center at UCSC. His research interests are in modeling, stability, robust control, observer design, and simulation of nonlinear and hybrid systems with applications to robotics, power systems, aerospace, and biology.



### Ashwin Mathew

VISITING SCHOLAR, UC  
BERKELEY CENTER FOR  
LONG-TERM CYBERSECURITY

Ashwin J. Mathew is a visiting scholar at the UC Berkeley Center for Long-Term Cybersecurity, a researcher at Packet Clearing House, and a fellow at the Slow Science Institute. He studies Internet governance through a focus on the relationships, practices, and institutions of the technical personnel who operate Internet infrastructure. He holds a doctorate and master's degree from the UC Berkeley School of Information. Prior to his doctoral work, he spent a decade working as a software engineer and technical architect in companies such as Adobe Systems and Sun Microsystems.

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