

CURRICULUM VITAE
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EDUCATION

- Ph.D., Computer Science, University of California, Los Angeles, CA, 1992 - 1999
 - Advisor: Walter Karplus
- M.S., Computer Science, University of Colorado, Boulder, CO, 1987 - 1991
- B.S., Mathematical Engineering (honors), Colorado School of Mines, Golden, CO, 1979 - 1983

SECURITY CLEARANCES

- DoD Top Secret, SCI, 2006 to present
 - Sponsoring Agency: NRO
- DoD Top Secret, SCI, 1990-1994
 - Sponsoring Agency: NSA

POSITIONS AND APPOINTMENTS

- **Research Director**, Decision Systems Group, Information Sciences Institute, University of Southern California, July 2015 – Present
 - Manage team of scientists and engineers (6-10) focused on research into systems engineering, control systems, big data analytics, machine learning, human-behavior modeling, intelligent human-computer interfaces and cyber-physical security. Responsibilities include helping team with proposal submissions, project management and research analysis.
 - Current projects:
 - USAF/Space Missile Center (SMC) funded projects (total funding: \$7M+) focused on addressing space control gaps for the SMC/SY (Space Superiority) and SMC/GP Programs (GPS systems). Manage project teams (employees and subcontractors) in El Segundo, CA, Denver, CO, Valley Forge, PA, Gaithersburg, MD and Rockville, MD. Efforts include providing subject matter expertise in the areas of Agile/DevOps software

- development, DoD 5000 (waterfall) development, systems engineering, cyber-security, project management and research into space- and ground-based command and control technologies. Classified and unclassified projects.
- Established CRADA (August 2019) with USAF Space and Missile Center's Special Projects Directorate (formally the Space Superiority Directorate)
 - Established USC/ISI as core member of consortium led by Advanced Research Systems (ARS) on the NASIC-funded Megastar program
 - Transient Plasma Applied to Marine Diesel Engines – \$9M+ project funded by Tai Chong Cheang Steamship Co (H.K.) Ltd. (TCC). Provide programmatic oversight of two campus-led project teams focused on applying transient plasma technology to marine diesel engines to improve combustion efficiency and emissions remediation. Campus-led project teams led by Dr. Martin Gundersen and Dr. Fokion Egolfopoulos.
 - Subject Matter Expert (SME) for DARPA-funded game-theory project (P/I Jim Blythe). Provide advice on JIATF-S operations (drug interdiction in the Gulf of Mexico, Caribbean and eastern portion of the Pacific) and challenges (application for game-theory research).
 - Completion of the NIST-funded Biomedical Devices and Equipment Consortium Organization to Roadmap Industry (BIOCOR) project – P/I. Develop recommendations to the US Government on technical steps to take to help the US maintain, re-gain or create leadership in the medical device manufacturing sector. Organized multiple workshops (3) and conferences (4) in the Los Angeles and Minneapolis areas to explore current and future industry needs. Developed surveys and small-group discussions. Developed BIOCOR Center of Excellence concept. Member of the Southern California Biomedical Consortium (SoCalBio).
 - Completion of the Los Angeles Department of Water and Power (LADWP) and US Department of Energy-funded Smart Grid Regional Demonstration Project. Provide oversight on \$18M+ project, four co-PIs, interfaced with LADWP, US DoE, UCLA, and JPL. Responsible for all programmatic and research aspects of the project. Funding covered 30+ scientists and engineering personnel
 - Lecturer: Cyber security, open source intelligence analysis, infrastructure protection, and systems engineering
 - Business development: seek funding for research into ground station operations, command and control, open source intelligence analytics, smart buildings (machine learning, data analytics) and cyber-physical security
- **Research Associate Professor, Sonny Astani Department of Civil and Environmental Engineering, University of Southern California, August 2013 – Present**
 - Focus on research into smart building technologies – including applying machine learning to occupancy detection, occupant behavior and preferences and system services platforms
 - Member of Ph.D. dissertation committees (three students)

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- **Research Affiliate**, Spatial Sciences Institute, David and Dana Dornsife College of Letters, Arts and Sciences, University of Southern California, August 2018 – Present
 - Research into applying risk assessment and resource allocation to infrastructure protection from all hazard's events
- **Interim Executive Director for Corporate and Foundation Relations**, Viterbi School of Engineering, University of Southern California, Jan 2016 – May 2017
 - Responsible for acquiring gifts and contributions to the USC Viterbi School of Engineering \$500M fund-raising campaign
 - Business development for Viterbi School of Engineering (190+ faculty and 100+ research scientists) - including identifying funding opportunities, development of proposals, contracting, intellectual property ownership, conflict resolution, liaison between researchers and corporate/foundation management
 - Funded projects cover research into cyber security, smart oil field technologies (machine learning), transient plasma applied to combustion and emissions remediation, materials science, systems engineering, system architectures, Internet of Things, space sciences, and advanced manufacturing
 - Manage three-person team that brought in \$29M+ in funding gifts
- **Assistant Division Director**, Information Sciences Institute, University of Southern California, January 2012 – June 2015
 - Lead, Decision Systems Group
 - Directly supervise eight research scientists & one senior software engineer
 - Investigator, USC Center for Risk and Economic Analysis of Terrorism Events (CREATE)
 - Supervise/mentor research: 3 post-docs, 2 MS students, 1 summer intern (MS), 1 DHS Scholar
 - Funding: Oversaw \$20M+ in research funding at USC-ISI and on USC Campus
 - Projects:
 - Ground station operations - business development. Embedded in overhead ground station operations (e.g., ADF-C); identified challenges and research opportunities; and developed proposals and recommendations
 - NIST Biomedical Devices and Equipment Consortium Organization to Roadmap Industry (BIOCOR) – P/I
 - NSF Understanding and Influencing Security and Privacy Decision-Making (UISPD) – P/I
 - DoE/LADWP Smart Grid Regional Demonstration Project (SGRDP)
 - USC Project P/I
 - Co-P/I Customer Behavior (SGRDP-CB) unit
 - Interim Co-P/I of Electric Vehicle (SGRDP-EV) unit (2012/2013)
 - DoE Building Level Energy Management System (BLEMS) – Co-P/I
 - Behavior-driven energy management systems for existing buildings
 - ONR Geospatial Analysis of Motion-Based Intelligence and Tracking (GAMBIT) – P/I

- Movement intelligence analysis technology (pattern recognition, anomaly detection)
 - DHS Port (PortSec) and Infrastructure (InfraSec) Security Risk Management and Resource Allocation (PortSec) - P/I
 - Dynamic risk assessment and infrastructure security counter-measure resource allocation technology
 - DHS Integrated Suspicious Activity Reporting and Decision Support (iSARs) – P/I
 - HUMINT analysis and decision-support technologies: data mining, pattern detection and resource allocation
- Skills: Systems engineering, systems integration
- **Supervising Computer Scientist/Project Leader**, USC-ISI, July 2003 - December 2011
 - Lead, Decision Systems Group, January 2010 – December 2011
 - P/I or Co-P/I: \$16.5M+ in research funding at USC
 - Investigator, USC Center for Risk and Economic Analysis of Terrorism Events (CREATE)
 - Direct research: Post-docs and summer interns
 - Investigator, Texas A&M National Center for Foreign Animal and Zoonotic Diseases Defense (FAZD Center)
 - Science Leader, Information Analysis Group (Texas A&M, University of California – Davis, Georgetown University, University of Maryland, University of Minnesota)
 - Research oversight: Animal disease spread models, economic consequence models, national security decision-support analytics
 - Investigator, University of Minnesota National Center for Food Protection and Defense (NCFPD)
 - Livestock movement (transportation) predictions based on market and environmental factors (FASTRANS)
 - Projects:
 - Smart grid customer behavior (LADWP/DoE) – behavior studies and surveys, multi-modal messaging and outreach approaches, customer behavior modification approaches
 - Behavior-driven energy management systems (DoE) - command/control, sensor analysis and decision-making, control/feedback systems, real-time operations
 - Operational prototype on USC campus
 - Movement intelligence analysis (ONR) – data mining, pattern detection, anomaly detection
 - Infrastructure security (DHS port and infrastructure protection) – risk analysis, resource allocation, decision-systems, real-time operations
 - Operational prototypes at Port of Los Angeles
 - Food and Agriculture security (DHS chem-bio) – modeling of food commodity movements and markets
 - Law enforcement counter-terrorism (FBI, LA Sheriff): Human Intelligence (HUMINT) analysis – data mining, pattern detection and resource allocation
 - Space exploration Ops (NASA) – planning, scheduling & execution decision-support

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- USMC aviation command/control (ONR) - Multi-aircraft planning, scheduling and execution system, real-time flight Ops decision-support (combat and training)
 - Transitioned to F-35 Joint Strike Fighter Program
 - Program office established at MARCORSSYSCOM
 - Prototype technology deployed to Iraq, Afghanistan and Horn of Africa, ship board and domestic garrison operations
 - Skills: C/C++, Java, Javascript, HTML, systems engineering, systems integration
- **Co-Founder & Chief Scientist/Engineer**, Enhanced Personal Audiovisual Technologies (EPAT), LLC, March 2005 – Present
 - System and Method of Adjusting Audiovisual Content to Improve Hearing, US Patents No. 8,020,102 and No. 8,239,768. Co-holder
 - Develop multi-modal human computer interface technology to assist hearing impaired with reception and understanding of information. Targeted venues: movie theaters, home entertainment, live entertainment, special Ops, military Ops
 - Skills: C/C++, systems engineering, systems integration
- **Computer Scientist**, USC-ISI, July 2001 – June 2003
 - Human/computer interfaces in mission-critical environments
 - USMC aviation command/control/mission management in combat/training environments
 - Planning, scheduling and execution technology
 - Resource allocation optimization
 - Deployed: Iraq, Afghanistan, Horn of Africa, Japan, US
 - Skills: C/C++, Java, JavaScript, HTML, systems engineering, systems integration
- **Research Assistant Professor**, Computer Science Department, University of California, Los Angeles, July 1999 – June 2002
 - Multi-modal human computer interfaces in mission-critical environments (fighter cockpit, air traffic control Ops)
 - Managed UCLA multi-media laboratory (Director: Dr. Walter Karplus) – 3 students
 - Transitioned technology to JPL R&D for Space Shuttle and International Space Station research
 - Skills: C/C++, systems engineering, systems integration
- **Consultant/Principal Engineer**, Sony Pictures Studios & Sony Cinema Products Corporation, January 1994 – May 2002
 - Chief software engineer of development team responsible for design and development of software, firmware and hardware for Academy Award winning (1996) Sony Dynamic Digital Sound (SDDS)
 - DFP-D2000, DFP-D2500, DFP-D3000 digital film decoders
 - DCP-1000 Digital Cinema Processor
 - SSU-1000 SDDS Setup Unit
 - Error detection and diagnostics (pattern/anomaly detection)
 - Auto-tuning
 - Installed in 10K+ theatres, sound stages, film labs around the world
 - 100M+ feet of SDDS encoded film
 - Initial step to digital cinema
 - Developed prototype Sony PlayStation 3-D virtual audio technology (1996)
 - Member of SMPTE digital cinema standards committee
 - Skills: C/C++, systems engineering, systems integration

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- **Graduate Research Assistant**, Computer Science Department, UCLA July 1995 – June 1999
 - Research: Virtual 3-D audio enhanced human computer interfaces in mission critical environments
 - Aircraft cockpit and air traffic control multi-modal communications – NASA and US Air Force Ops (work undertaken at NASA/Dryden Aircraft Research Center - Edwards, CA)
 - Skills: Fortran, C/C++, systems engineering, systems integration
- **Graduate Research Assistant**, Department of Physiological Sciences, UCLA, July 1993 – June 1995
 - Cat (feline) locomotion and central pattern generation modeling
 - Research: Human color vision modeling (color constancy)
 - Skills: Fortran, C/C++, systems engineering, systems integration
- **Senior Member of Technical Staff**, TRW Space & Defense (Northrop Grumman), March 1990 – July 1994
 - Designed, developed and deployed software systems (ground station operations and analysis technology) – National Assets (Classified)
 - Skills: Fortran, C/C++, systems engineering, systems integration
- **Senior Software Engineer**, Auto-trol Technologies, Inc, October 1987 – February 1990
 - Vectorpipe: Process plant 3-D design & analysis software (food & agriculture, petrochemical, pharmaceuticals, paper-pulp). Customers: Chevron Oil, Frito-Lay, Tata Chemicals, James River, and many others
 - Skills: Fortran, C/C++, systems engineering, systems integration
- **Staff Engineer/Systems Manager**, EMC Engineers, Inc, June 1983 – September 1987
 - Energy management systems and operational efficiencies – DoD applications
 - Steam generation optimization
 - Skills: Fortran, C/C++, systems engineering, systems integration
- **Technician**, Colorado School of Mines Research Institute, January 1980 – May 1983
 - Mineral (gold, silver, uranium) extraction and processing
 - Skills: Heavy equipment, explosives and chemical processing operations

LEADERSHIP/COMMITTEE POSITIONS

- Member, Program Committee, Thirty-Second Conference on Innovative Applications of Artificial Intelligence (IAAI-20), February 9 – 11, 2020
- Member, Program Committee, Thirty-First Conference on Innovative Applications of Artificial Intelligence (IAAI-19), January 27 – February 1, 2019
- Member, Program Committee, Thirtieth Conference on Innovative Applications of Artificial Intelligence (IAAI-18), February 2-7, 2018
- Member, SoCalBio First Annual Digital Health Summit planning committee, June 2017 – November 2017
- Member, Provost's Committed on Security and Sustainability, April 2017 to present
- Member, Dean's Advancement Office Leadership Group, January 2016 to May 2017
- Member, DoE/LADWP Smart Grid Regional Demonstration Project Executive Committee, August 2011 – June 2016

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- Member, Planning Committee, USC Center for Risk and Economic Analysis of Terrorism Events (CREATE) Executive Program on Counter-Terrorism, March 2006 – Present
 - DHS-funded Center of Excellence
- Member, Cyber Track Committee, 2015 IEEE International Conference on Technologies for Homeland Security HST '15, Oct 2014 – April 2015
- Member, Cyber Track Committee, 2013 IEEE International Conference on Technologies for Homeland Security HST '13, May – November 2013
- Member, TSA Pre-Check Background Check Assessment Panel, US Department of Homeland Security Transportation Security Administration (TSA), October - December 2013
- Member, Steering Committee, USCG/USC CREATE Maritime Risk Symposium, March – August 2012
- Member, Cyber Track Committee, 2012 IEEE International Conference on Technologies for Homeland Security HST '12, May – November 2012
- Member, Cyber Track Committee, 2011 IEEE International Conference on Technologies for Homeland Security HST '11, May – November 2011
- Science Leader, Information Analysis Systems (IAS) Group, National Center for Foreign Animal and Zoonotic Diseases Defense (FAZD), Texas A&M University, October 2006 – September 2009
 - DHS-funded Center of Excellence
 - \$3M+ in funding
- Member, FAZD Center Executive Committee, FAZD Center, Texas A&M University, October 2006 – September 2009
- Member, Planning Committee, DHS Science & Technology Directorate Workshop on Future Directions in Critical Infrastructure Modeling & Simulation, Spring 2008
- Member, SMPTE Digital Cinema Standards Committee, January 1998 – June 2001

RESEARCH SUPPORT

- “Backpack: Content Bucket Viewer and Distributor,” U.S. Department of State (Award number: S-NEAAC-19-CA-0062), 1 Jan 2020 – 31 July 2022, **Michael Orosz (P/I), \$1,224,440**
- “WRT-1012: Global Positioning Systems - Mission Engineering and Integration of Emerging Technologies,” Subcontract Stevens Institute of Technology (Systems Engineering Research Center – SERC) | Prime USAF (Award number: HQ003419F0298), 26 June 2019 – 25 June 2020, **Michael Orosz (P/I), \$1,450,791**
- “Subject Matter Expert Support to Sandia National Laboratories for SMC/SY Programs,” Subcontract Sandia National Laboratories | Prime USAF (Award number: 1949738), 15 January 2019 – 31 August 2019, **Michael Orosz (P/I), \$782,113**
- “RT 200: Systems Engineering Approaches for Interagency Space Situational Awareness,” Subcontract Stevens Institute of Technology (Systems Engineering Research Center –

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SERC) | Prime USAF (Award number: HQ003418F0234), 8 June 2018 – 7 June 2019, **Michael Orosz (P/I), \$437,452.00**

- “SMC/GP Assessment and Improvement of Manned and Unmanned Systems Controls and Sensor Payloads (SMC_GP),” Subcontract Georgia Institute of Technology | Prime USAF (Award number: D8089-S9), 18 September 2017 – 13 February 2019, **Michael Orosz (P/I), \$3,027,963**
- “SMC Novel Systems Engineering and Software to Address Space Control Gaps for SMC/SY Program (SMC_SES),” Subcontract SAIC | Prime USAF (Award number: P010226897), 6 July 2017 – 31 March 2018, **Michael Orosz (P/I), Edward Russell (Project Director), \$2,426,942**
- “SMC Space Capability and Novel Technologies for Force Applications SMC/SY Program,” Subcontract Georgia Institute of Technology | Prime USAF (Award number: D7888-S6), 1 June 2017 – 29 April 2019, **Michael Orosz (P/I), Edward Russell (Project Director), \$1.350,000**
- “Biomedical Devices and Equipment Consortium Organization to Roadmap Industry (BIOCOR),” National Institute of Standards and Technology (Award number: 70NANB15H063), 1 June 2015 – 31 May 2018, **Michael Orosz (P/I), \$500K**
- “Development of Predictive Situational Awareness and Patrolling System,” US Department of Homeland Security (DHS-10-ST-061-001A), 1 July 2015 – 30 June 2016 (via USC CREATE), **Michael Orosz (P/I), \$50K**
- “DPS_Deploy – USC Department of Public Safety Risk Assessment and Resource Management,” Department of Homeland Security (DHS-10-ST-061-001A), 2014-2015 (via USC CREATE), **Michael Orosz (P/I), \$32.5K**
- “Smart Grid Project Administration,” Los Angeles City – Department of Water and Power, CB-Admin, May 2015 – June 2016, **Michael Orosz (P/I), \$86K**
- “Customer Behavior – Phase 5.2, “Los Angeles City – Department of Water and Power,” CB-USC-5.2, May 2014 – April 2015, **Michael Orosz (P/I), \$200K**
- “Customer Behavior – Phase 5.1,” Los Angeles City – Department of Water and Power,” CB-USC-5.1, Dec 2013- April 2015, **Michael Orosz (Co-P/I), \$300K**
- “SBE: Medium: Understanding and Influencing Security and Privacy Decision-Making (UISPD),” National Science Foundation (Award number: SES-1314644), 15 Sept 2013 – 31 August 2015, **Michael Orosz (P/I), Tanya Ryutov (Co-P/I), Heather Rosoff (Co-P/I) \$600K**
- “Los Angeles Department of Water and Power Smart Grid Regional Demonstration Project (SGRDP),” Department of Energy and Los Angeles Department of Water and Power (DE-OE0000192), 2010 – 2016, **Michael Orosz (overall P/I), \$18.5M**
 - Co-P/I for Customer Behavior
 - Interim Co-P/I for Electric Vehicles (2011-2013)
- “GAMBIT: Geospatial Analysis of Motion Based Intelligence and Tracking,” Office of Naval Research (N00014-12-1-0121), 2011-2015, **Michael Orosz (P/I), \$2.52M**

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- “Building Level Energy Management Systems (BLEMS),” Department of Energy (DE-EE0004019), 2010-2013, **Michael Orosz** (P/I: Preston Marshall), **\$2,207,805 - Co-P/I and Project Director**
- “InfraSec – Infrastructure Security,” Department of Homeland Security (DHS-10-ST-061-001A), 2011-2014 (via USC CREATE), **Michael Orosz** (P/I), **\$65K**
- “PortSec – Port Security Project,” Department of Homeland Security (DHS-10-ST-061-001A), 2010-2014 (via USC CREATE), **Michael Orosz** (P/I), **\$220K**
- “Development of Livestock Movement and Marketing Tracking System (FASTRANS),” Department of Homeland Security (2010-ST-061-AG002), 2010-2011 (via FAZD Center), **Michael Orosz** (P/I), **\$90K**
- “SAFERlab: Using DETER for Test and Evaluation of SAFER Technologies,” DARPA (N66001-11-C-4021), 2010-2014, Terry Benzel (P/I), **\$6,442,177**
 - Project Manager
- “CREATE Risk Analysis Workbench (RAW),” Department of Homeland Security (N00014-05-1-0630), 2004-2010 (via USC CREATE), **Michael Orosz** (with Terry Benzel, Robert Neches), **\$1,250,000 - Co-P/I and Project Leader**
- “IAS Theme Leadership and Decision Support System (DSS) Extension,” Department of Homeland Security (2007-ST-061-000002), 2007-2009 (via FAZD Center), **Michael Orosz** (P/I), **\$725,940**
- “Risk Analysis and Models of Plans for Attacks to Recognize Terrorist Schemes (RAMPARTS),” IARPA (FA8750-07-0177), 2007-2008, Robert Neches, \$780K
 - Project Leader
- “Food and Agriculture Sector National Transportation Model and FASTRANS,” Department of Homeland Security (X9106030103), 2007-2009 (via University of Minnesota), **Michael Orosz** (P/I), **\$119,036**
- “System Design & Development for an Integrated Risk Analysis Tools (FAZD),” Department of Homeland Security (N00014-04-1-0660), 2005-2007 (via FAZD Center), **Michael Orosz** (with Terry Benzel, Robert Neches), **\$595,405 – Co-P/I and Project Leader**
- “Comprehensive, Analytic, Real-Time Execution in Joint Air Operations (CARTE),” Office of Naval Research (N00014-03-C-0222), 2003-2007, **Michael Orosz** (with Robert Neches), **\$4,490,887 – Co-P/I and Project Leader**
- “Coordinated Multi-Source Maintenance on Demand (CMMD),” NASA (NNA05CS29A), 2005-2006, Robert Neches, **\$1,793,715**
 - Project Leader
- “Comprehensive Analytic Computing Environment (CACE),” Office of Naval Research, 2001-2003, Robert Neches, **\$6.6M**

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- Computer Scientist

COURSES TAUGHT

Spring Semester 2019-2020: **PPD 599: An Exploration into the Intelligence Community – from Policy to Cyber Espionage**, 4 hours, USC Price School of Policy and Planning

PUBLICATIONS and PRESENTATIONS

Refereed Papers

- Sintov, N., Dux, E., Tran, A. and **Orosz, M.** (2016), “What Goes on Behind Closed Doors? How College Dormitory Residents Change to Save Energy During a Competition-based Energy Reduction Intervention,” <http://dx.doi.org/10.1108/IJSHE-02-2015-0027>, International Journal for Sustainability in Higher Education, Vol. 17 Issue: 4, pp.451 - 470
- Konis, K., **Orosz, M.** and Sintov, N., “A Window into Occupant-driven Energy Outcomes: Leveraging Sub-metering Infrastructure to Examine Psychosocial Factors Driving Long-term Outcomes of Short-term Competition-based Energy Interventions,” Energy and Buildings, 116 (2016), January 2016, pp 206-217
- Ryutov, T., **Orosz, M.**, Winterfeldt, D., and Blythe, J., “A Game theoretic Framework for Modeling Adversarial Cyber Security Game among Attackers, Defenders, and Users,” 11th International Workshop on Security and Trust Management (STM 2015), Published in Springer the *Lecture Notes in Computer Science (LNCS) series*. Vol 9331, 2015 pp. 274-282, Vienna, Austria
- Sintov, N.D., **Orosz, M.D.**, & Schultz, P.W. (2015, August). “Personalized Energy Reduction Cyber-Physical System (PERCS): A gamified end-user platform for energy efficiency and demand response.” Proceedings of the 17th annual International Conference on Human-Computer Interaction published in *Lecture Notes in Computer Science*, 9189, 602-613. Los Angeles, CA.
- Jazizadeh, F., Ghahramani, A., Becerik-Gerber, B., Kichkaylo, T., and **Orosz, M.**, “Human-Building Interaction Framework for Personalized Thermal Comfort Driven Systems in Office Buildings,” ASCE Journal of Computing in Civil Engineering, Special Issue: Computational Approaches to Understand and Reduce Energy Consumption in the Built Environment, Vol. 28, No.1, pp: 2-16, 2014.
- Jazizadeh, F., Ghahramani, A., Becerik-Gerber, B., Kichkaylo, T., **Orosz, M.**, “User-Led Decentralized Thermal Comfort Driven HVAC Operations for Improved Efficiency in Office Buildings,” <http://dx.doi.org/10.1016/j.enbuild.2013.11.066> Energy and Buildings, 70 (2014), February 2014, pp 398-410
- Yang, Z., Li, N., Becerik-Gerber, B., and **Orosz, M.**, “A Systematic Approach to Occupancy Modeling in Ambient Sensor Rich Office Environments,” Simulation: Transactions of the Society for Modeling and Simulation International, Special Issue: Simulation for Architecture and Urban Design, Vol 90(8), March 2013, pp: 960-977.
- Yang Z, Li N, Becerik-Gerber B, and **Orosz M.** “A Non-Intrusive Occupancy Monitoring System for Demand Driven HVAC Operations,”

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(<http://cedb.asce.org/cgi/WWWdisplay.cgi?289937>), *Proceedings, CRC 2012: Construction Research Congress: Construction Challenges in a Flat World*, ASCE, Reston, VA 21-22 May 2012, 828-837

- Kichkaylo, T., Ryutov, T., **Orosz, M.**, and Neches, R. “Planning to Discover and Counteract Attacks,” *Informatica*, 34 (2010) pp 159-168.
- **Orosz, M. D.**, Southwell, C., Barrett, A., Bakir, O., Chen, J., and Maya, I., “PortSec: Port Security Risk Management and Resources Allocation System,” in *Proceedings of the 12th IFAC Symposium on Control in Transportation Systems, (CTS'09)*, Redondo Beach, CA, 2-4 Sept 2009
- Kichkaylo, T., Van Buskirk, C., Singh, S., Neema, H., **Orosz, M.**, and Neches, R., “Mixed-initiative planning for space exploration missions,” in *Proceedings of the ICAPS'07 Workshop on Moving, Planning and Scheduling, International Conference on Automated Planning and Scheduling*, Providence, RI, 22-26 September 2007
- **Orosz, M.**, Kichkaylo, T., Balaban, E., Goforth, A., Sweet, A., and Neches, R., “Tracking Logistical Constraints Across Missions and Organizations: A Multipurpose Information Infrastructure,” in *Proceedings of 2nd Annual IEEE Conference on Space Mission Challenges for Information Technologies (SMC-IT 2006)*, Pasadena, CA, 17-20 July 2006, pp 306-313
- Balaban, E., **Orosz, M.**, Kichkaylo, T., Goforth, A., Sweet, A., and Neches, R., “Planning to Explore: Using a Coordinated Multisource Infrastructure to Overcome Present and Future Space Flight Planning Challenges,” in *Proceedings of AAAI 2006 Spring Symposium on Distributed Plan and Schedule Management, Technical Report SS-06-04, 2006*, Stanford University, Palo Alto, CA, 27-29 March 2006, pp. 9-16
- Goforth, A., Karsai, G., **Orosz, M.**, Neches, R., Szekely, P., and Ashish, N., “Attaining program affordability through integration of logistical operations and health maintenance,” in *Proceedings of 2005 AIAA 1st Space Exploration Conference: Continuing the Voyage of Discovery*, Orlando, FL. 30 Jan – 1 Feb 2005
- MacDonald, J., Balakrishnan, J. D., **Orosz, M. D.**, and Karplus, W. J., “Intelligibility of speech in a virtual 3D environment: optimal design of auditory information displays”, *Journal of Human Factors Research*, (derived from Ph.D. Thesis), February 2002.
- **Orosz, M. D.**, Karplus, W. J., and Balakrishnan, J. D., “Using virtual 3-D audio in multi-speech channel and multimedia environments,” in *Cockpit Display VII: Displays for Defense Applications, Darrel G. Hopper, Editor, Proceedings of SPIE Vol. 4022*, (derived from Ph.D. Thesis), 2000, pp 166-176
- **Orosz, M. D.**, “A methodology for developing and controlling human/computer interfaces,” *Ph.D. Dissertation*, Computer Science Department, University of California, Los Angeles, June 1999
- Chambers, S., **Orosz, M. D.**, and Bradley, N.S., “Kinematic analysis of wing and leg movements for type I motility in E9 chick embryos,” *Experimental Brain Research, Vol. 103*, 1995
- **Orosz, M. D.**, Chambers, S., and Bradley, N.S., “Correcting two-dimensional kinematic errors for chick embryonic movements *in ovo*,” *Computers in Biology and Medicine, Vol. 24, No. 4*, 1994.
- Wolfe, W. J., MacMillian, J. M., Brady, G., Mathews, R. Rothman, J. A., Mathis, D.,

Orosz, Michael, D.

Orosz, M. D., Anderson, C., and Alaghand, G., “Inhibitory grids and the assignment problem,” *IEEE Transactions on Neural Networks*, Spring 1993.

Non-Refereed Papers

- **Orosz, M.**, Chen, J., Maya, I., Salazar, D., Chatterjee, S. and Wei, D., “Protecting our Nation’s Ports with the Port Security Risk Analysis and Resource Allocation System (PortSec 3.0),” in Proceedings of 2013 IEEE International Conference on Technologies for Homeland Security (IEEE HST 2013), 12-14 November 2013, Waltham, MA, pp 38-42
- Lennon, E., **Orosz, M.**, Kichkaylo, T., Maya, I., Wei, D., “PortSec2.0: The Next Generation,” in Proceedings of 2012 IEEE International Conference on Technologies for Homeland Security (IEEE HST 2012), 13-15 November 2012, Waltham, MA, pp 255-259
- Yang Z, Li N, Becerik-Gerber B, **Orosz M.** “A Multi-Sensor Based Occupancy Estimation Model for Supporting Demand Driven HVAC Operations,” in Proceedings of *Simulation for Architecture and Urban Design (SimAUD)* (<http://toc.proceedings.com/14527webtoc.pdf>), Orlando, FL, 26-30 March 2012, pp. 100-107
- **Orosz, M. D.**, Southwell, C., Barrett, A., Chen, J., Ioannou, P., Afshin, A., and Maya, I., “PortSec: A Port Security Risk Analysis and Resources Allocation System,” in Proceedings of the *IEEE International Conference on Technologies for Homeland Security* <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5655048>, Waltham, MA, 8-10 November 2010
- **Orosz, M. D.**, Karplus, W. J., and Balakrishnan, J. D., “A test bed for prototyping human/computer interfaces used in mission critical environments,” in Proceedings of *1st Annual IEEE International Conference on Multimedia and Expo (ICME2000)*, New York, NY, (derived from Ph.D. Thesis), 30 July – 2 August 2000
- **Orosz, M. D.**, “Tuning VAX/VMS for a large application,” *Proceedings US Spring DECUS Symposium*, Atlanta, GA, 1989.
- **Orosz, M. D.**, “Programming with the VAX/VMS screen management routines,” *Proceedings US Fall DECUS Symposium*, San Francisco, CA, 1986.
- **Orosz, M. D.**, “Using programming tools for computer program development,” *Proceedings Fifth New Mexico DECUS Symposium*, Albuquerque, NM, fall 1985

Presentations/Invited Talks

- **Orosz, M.**, “WRT-1012: Global Positioning Systems – Mission Engineering and Integration of Emerging Technologies,” presented at 11th Annual SERC Sponsor Research Review, Washington DC, 19 November 2019.
- Orme, M., Malinzak, J., Elledge, R., **Orosz, M** (Moderator), “Technology of the Future,” panel discussion, Advanced Manufacturing Partnership (AMP) Southern California Bi-Annual Meeting, University of Southern California, Los Angeles, CA, 14 November 2017

Orosz, Michael, D.

- **Orosz, M.**, “BIOCOR – A Bridge from Medical Device Manufacturing to Digital Health,” presented at the First Annual SoCalBio Digital Health Summit, University of Southern California, Los Angeles, CA, 7 November 2017
- **Orosz, M.** “Cyber-Physical Security in the Energy Sector,” presented at the Regatta Solutions Board Meeting, Dana Point, CA, 2 November 2017
- Poor, R. (Moderator), Paul, D., Van Den Berg, M., **Orosz, M.**, Estes, C., and Riley, E.,” Change Happens Fast: Are We Nearing the End of the Fossil Fuel Era?,” panel discussion (<https://www.coolenergyworld.com/events/2017/4/5/change-happens-fast>), Cool Energy World Forum, University of Southern California, Los Angeles, CA, 5 April 2017.
- Duggleby, A., Hwang, D., Atkins, R., **Orosz, M** (Moderator)., “Industry in Transition – Changes in Aerospace and Defense,” panel discussion, Advanced Manufacturing Partnership (AMP) Southern California Bi-Annual Meeting, California Science Center, Los Angeles, CA, 9 March 2017
- **Orosz, M.D.** “Marriage of MedTech and Digital Health Opportunities and Challenges,” Keynote address, SoCalBio Digital Health Working Group Meeting, Los Angeles, CA, 28 February 2017.
- Lamy, S., Fleming, S., **Orosz, M.D.**, and Petraeus, D., “Interactions of Human Security and Geospatial Intelligence,” Roundtable discussion (<https://youtu.be/vHAFiID1eHA>), Doheny Library, University of Southern California, Los Angeles, CA, 3 November 2016.
- Sintov, N. D., **Orosz, M. D.**, and Schultz, P.W., “Personalized Energy Reduction Cyber-Physical System (PERCS): A Gamified End-User Platform for Energy Efficiency and Demand Response,” to be presented at the 2015 HCI International Conference, Los Angeles, CA, 2-7 August 2015.
- **Orosz, M.**, “DPS_Deploy, USC Department of Public Safety Deployment System,” panel presentation, CREATE-TSA Symposium on Aviation Security, USC, Los Angeles, CA, 21st July 2015
- **Orosz, M.**, “Cyber Security,” invited talk, USC Price School Executive Education Forum, Los Angeles, CA, 17 April 2015
- **Orosz, M.**, “Smart Grid Research at USC,” Innovation with Impact Panel, USC Trustees 2015 Conference, La Quinta, CA, 29 March 2015
- **Orosz, M.**, “Cyber Security and the Sony Pictures Hack,” invited talk, Los Angeles World Affairs Council, Culver City, CA, 13 January 2015
- **Orosz, M.**, Ryutov, T., Blythe, J., Rosoff, H., John, R. and von Winterfeldt, D., “Modeling Values and Trade-offs Among Players in a Three-way Adversarial Cyber-Security Game,” presented at the National Science Foundation SaTC Principal Investigators Meeting, Arlington, VA, 5-7 January 2015
- **Orosz, M.**, “Maritime Cyber Policy,” presented at the 5th Annual Maritime Risk Symposium, USC Campus, Los Angeles, CA, 18 November 2014
- **Orosz, M.**, “Open Source Intelligence and Social Media: Their use in Emergency Management,” presented at the 2014 Annual City of Los Angeles Emergency Management Workshop, Skirball Cultural Center, Los Angeles, CA, 7 October 2014.
- **Orosz, M.**, Jazizadeh, F., Becerik, B., “Building Level Energy Management Systems (BLEMS),” presented at the 2014 ARPA-E Energy Innovation Summit Technology Showcase, 24-26 February 2014, National Harbor, MD

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- **Orosz, M.**, “Addressing Human Behavior in Cyber Security,” presented at the 2014 AFCEA West Conference, 11-13 February 2014, San Diego, CA
- **Orosz, M.**, Maya, I., Morgan, Y., “PortSec: Risk Assessment and Resource Allocation,” presented at the DHS University Centers of Excellence Innovation Showcase First Responder Technology Demonstration, 11 February 2014, Washington, DC
- **Orosz, M.**, Salazar, D., Chatterjee, S., Wei, D., Zhao, Y., “Using PortSec for Policy-Making and Risk-Benefit Balancing,” in Proceedings of 2013 Annual Meeting of the Society of Risk Analysis (SRA), 8-11 December 2013, Baltimore, MD
- Lennon, E., Sintov, N. and **Orosz, M.**, “Current On-Campus Attitudes toward Energy Usage, Efficiency, and Emerging Technologies,” presentation, *AASHE Conference and Expo, Resiliency and Adaptation*, October 6-9, 2013, Nashville, TN
- Li, N, Yang, Z., Becerik-Gerber, B. and **Orosz, M.**, “Towards Energy Savings from a Bimodal Occupancy Driven HVAC Controller in Practice,” presented at the 30th CIB W78 International Conference 2013, Beijing, China, 9-12 October 2013
- **Orosz, M.**, “The Intelligence Community,” presented at the *Bi-Annual USC CREATE Executive Program in Counter-Terrorism*, Los Angeles, CA, 30 July 2013.
- **Orosz, M.**, “Drones: A Wave for Future Safety and Security,” presented at the 2013 National Sports Safety and Security Conference and Exhibition, Orlando, FL, 16-18 July 2013
- Jazizadeh, F., Ghahramani, A., Becerik-Gerber, B., Kichkaylo, T., and **Orosz, M.**, “Personalized Thermal Comfort Driven Control in HVAC Operated Office Buildings,” to be presented at the 2013 ASCE International Workshop on Computing in Civil Engineering (IWCCE) Conference, June 2013.
- **Orosz, M.**, “Future Air Border Security: Intelligent Randomization,” presented at the International Border Security: Air, Land and Sea Borders (IBS) Workshop, Rovaniemi, Finland, 21-24 March 2013.
- **Orosz, M.**, Kichkaylo, T., Lennon, E., Maya, I., Wei, D., Chatterjee, S., Salazar, D., “Seaport Security (PortSec): The Next Phase – Incidents, Special Events and Risk,” in Proceedings of 2012 Annual Meeting of the Society of Risk Analysis (SRA), 9-12 December 2012, San Francisco, CA
- **Orosz, M.**, “The Need for Operationally-Informed Model Developers – Do We Need Renaissance Researchers?,” Keynote address presented at The Society for Modeling & Simulation International, AUTUMNSIM 2012, Autumn Simulation Multi-conference 2012, October 28-31, 2012, San Diego, CA
- **Orosz, M.**, Lennon, L., “Innovations in Port Security with UICDS,” invited speakers, SAIC Unified Incident Command and Decision Support (UICDS), Webinar, 27 September 2012.
- **Orosz, M.**, Maya, I., “USC CREATE Port Security Risk and Resource Management System (PortSec),” presented at the *World Conference on Transport Research Society (WCTRS), Special Interest Group 2 - Key Developments in the Port Maritime Sector*, Antwerp, Belgium, 21-22 May 2012
- **Orosz, M.**, “Infrastructure threats, vulnerabilities & intelligence challenges,” invited speaker, *National Center for Food Protection and Defense, Webinar*, 2 April 2012.
- Southers, E and **Orosz, M.**, “Transportation threats, vulnerabilities & intelligence challenges”, presented to *Venture Sheriff’s Department*, Camarillo, CA, 6 March 2012

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- **Orosz, M. D.**, “Economic and Mission Impacts of Malicious Cyber Activity,” presented at *The Cyber Adversary: Impacting Your Mission, CREATE/ISI Cyber Seminar Series, University of Southern California*, Los Angeles, 24 January 2012
- Southers, E and **Orosz, M.**, “Air transportation threats, vulnerabilities & intelligence challenges,” presented at the *7th Annual Sacramento InfraGard Members Alliance Security Symposium*, Sacramento, CA, 9 December 2011.
- **Orosz, M. D.**, Southwell, C., Chen, J., Chatterjee, S., Salazar, D., Southers, E. and Maya, I., “PortSec: A port security risk analysis and resource allocation system – from tactical to strategic,” presented at the *2011 SRA Annual Meeting*, Charleston, SC, 4-7 December 2011
- **Orosz, M.**, Roesler, R., Becerik-Gerber, B., Kichkaylo, T, Ryutov. T., Touch, J., Maheswaran, R., Chang, Y., Marshall, P, “Building Level Energy Management System (BLEMS) Behavior Driven Building Energy Management,” poster presented at the *Annual SERDP/ESTCP Partners in Environmental Technology Technical Symposium & Workshop*, Washington, DC, 29 November – 1 December 2011.
- **Orosz, M. D.**, “PortSec: Port Security Resource Allocation and Cost-Benefit Analysis,” presented at the *2nd Annual Maritime Risk Symposium*, Rutgers University, Piscataway, NJ, 7-9 November 2011.
- **Orosz, M. D.**, “PortSec: Application of a General-Purpose Physical Infrastructure Risk Analysis and Resource Allocation System,” presented at the *Ohio Homeland Security Technology Review*, Strategic Analysis Information Center, Ohio Department of Homeland Security, Columbus, OH, 9 September 2011
- **Orosz, M.**, “Intelligence Driven Security: Challenges and the Need for Standards, Open Source and Research,” presented at the *5th Annual USC CREATE Executive Program in Counter-Terrorism* (keynote speaker), Los Angeles, CA, 5 August 2011.
- Southwell, C., Maya, I., and **Orosz, M.**, “PortSec: A Port Security Risk Analysis and Resource Allocation System,” presented at the *79th Military Operations Research Symposium (MORS)*, Naval Postgraduate School, Monterey, CA, 20-23 June 2011.
- **Orosz, M.**, Hoffman, J., and Beckham, T., “FASTRANS: Food and Agriculture Sector Movement and Marketing Analysis System,” presented at the *Fifth Annual DHS University Network Summit*
http://www.homelandsecurity.org/DHSUnivSummit2011/Orosz_Hoffman_Beckham_WhitePaper_06May11.pdf, Washington, DC, 30 March – 1 April 2011.
- **Orosz, M. D.**, “PortSec: A Port Security Risk Analysis and Resources Allocation System,” presented at the *First Annual USC CREATE/USCG Maritime Workshop*, Los Angeles, CA, 15-17 November 2010.
- **Orosz, M.**, Beckham, T., and Hoffman, J., “FASTRANS: Food and Agriculture Sector Movement and Marketing Model – Project Status,” presented to the *DHS Critical Infrastructure Partnership Advisory Council (CIPAC) Food and Agriculture Sector Joint Quarterly Meeting*, (invited speaker), Arlington, VA, 28 October 2010.
- **Orosz, M.**, “PortSec: A Port Security Risk Analysis and Resource Allocation System,” presented at the *World Port Security Summit (WPSS)*, (invited speaker), Los Angeles, CA, 10 September 2010.
- **Orosz, M.**, Barrett, A., Chen, J., Blair, A., and Maya, I., “PortSec: A Framework for

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Modeling Complex Port Infrastructures,” presented at the *Workshop on Grand Challenges on Modeling, Simulation, and Analysis for Homeland Security (MSAHS-2010)*, George Mason University School of Law, Washington, DC, 17-18 Mar 2010.

- **Orosz, M.** “Challenges in Suspicious Activity Reporting (SARs),” presented at the *4th Annual DHS University Network S&T Summit*, Washington DC, March 10-12, 2010
- **Orosz, M.**, “National Center for Risk and Economic Analysis of Terrorism Events (CREATE),” presented to the *Los Angeles Breakfast Club*, Los Angeles, CA, 27 January 2010 (keynote speaker)
- **Orosz, M.**, Barrett, A., Bakir, O., Southwell, C., Chen, J., and Maya, I., “Port Security (PortSec) Risk Management and Resource Allocation II: Application,” presented at the *2009 Society of Risk Analysis (SRA) Annual Conference*, Baltimore, MD, 9 Dec 2009.
- Barrett, A., **Orosz, M.**, Bakir, O., Southwell, C., Chen, J., and Maya, I., “Port Security (PortSec) Risk Management and Resource Allocation I: Methodology,” poster presented at the *2009 Society of Risk Analysis (SRA) Annual Conference*, Baltimore, MD, 7 Dec 2009.
- **Orosz, M.**, “National Center for Risk and Economic Analysis of Terrorism Events (CREATE),” presented to the *Military Officers of America Association (MOAA)*, Glendale, CA, 17 October 2009 (keynote speaker)
- Kichkaylo, T., Ryutov, T., **Orosz, M.D.**, and Neches, R.T., “Planning to Discover and Counteract Attacks,” presented at the *Quantitative Risk Analysis for Security Applications (QRASA) Workshop, IJCAI 2009*, Pasadena, CA, 11-17 July 2009
- **Orosz, M.** “FASTRANS – Food and Agriculture Sector Movement and Marketing Model,” presented at the *2009 Los Alamos National Laboratory Risk Symposium*, Santa Fe, NM, 7-9 April 2009
- **Orosz, M.** “PortSec: Port Operations Modeling for Security Risk Management and Resource Allocation,” presented at the *3rd Annual DHS University Network S&T Summit*, Washington DC, 17-19 March 2009
- **Orosz, M.**, Hoffman, J., Clarke, N., Kennedy, S., “National Food and Agriculture Sector Transportation and Movement Model and FASTRANS,” presented at the *2008 IEEE International Conference on Technologies for Homeland Security HST '08*, Waltham, MA, 12-13 May 2008
- Ryutov, T., Kichkaylo, T., Neches, R. & **Orosz, M.**, “SFINKS: Secured Focus Information, News, and Knowledge Sharing,” presented at the *IEEE International Conference on Technologies for Homeland Security HST '08*, Waltham, MA, 12-13 May 2008
- **Orosz, M.** “FASTRANS: Modeling the Interstate Movement of Animals and Commodities – A Necessary Step in Disease Spread Modeling,” presented at the *2nd Annual DHS University Network S&T Summit*, Washington DC, 19-20 March 2008
- **Orosz, M.** and Clarke, N. “Overview of Risk Analysis Research at the National Center for Foreign Animal and Zoonotic Diseases (FAZD) Defense,” presented at the *2008 Los Alamos National Laboratory Risk Symposium*, Santa Fe, NM, 11-13 March 2008
- Kichkaylo, T. **Orosz, M.** and Neches, R. “Semantic Information Channeling,” presented at the *Undersea Distributed Networked Systems Conference*, NDIA, Newport, RI 13-15 February 2007

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- Kichkaylo, T., Neches, R., **Orosz, M.**, & Yao, K-T., “Making Sense of Adversaries’ Plans,” *Collaborative Sensemaking Workshop*, University of Maryland, College Park, MD, 1 June 2007
- **Orosz, M.** “CREATE Risk Analysis Workbench and FAZD Center Activities,” presented at the *1st Annual DHS University Network S&T Summit*, Washington DC, 16 March 2007
- **Orosz, M.** and Neches, R., “Smart Attention Management Aided by Negotiation Technology to Heighten Alertness (SAMANTHA).” Presented at *DARPA Augment Cognition Conference*, Austin, TX, December 2001
- **Orosz, M. D.**, Karplus, W. J., and Balakrishnan, J. D., “Virtual 3-D audio and the flight control room: implementation,” presented at the *2001 UCLA-NASA Annual Research Review*, NASA-Dryden Flight Systems Research Center, Edwards, CA, 14 May 2001.
- **Orosz, M. D.**, “Methods for controlling human/computer interfaces,” Poster presented at the *UCLA Computer Science Department Research Review*, Los Angeles, CA, 8 April 1999.
- Balakrishnan, J. D., **Orosz, M. D.**, and Karplus, W. J., “Virtual three-dimensional audio and the mission control room,” presented at the *1999 UCLA-NASA Annual Research Review*, NASA-Dryden Flight Systems Research Center, Edwards, CA, 28 March 1999
- **Orosz, M. D.**, “Three-dimensional audio in the human computer interface,” Poster presented at the *UCLA Computer Science Department Research Review*, Los Angeles, CA, 7 April 1998.
- **Orosz, M. D.** and Bradley, N.S., “An algorithm to correct errors in 2D kinematic data due to movement out-of-plane,” poster presented at the *Society of Neuroscience Annual Meeting*, Washington DC, November 1993.

DISSERTATION/THESIS COMMITTEES

- Member Dissertation Committee, Mayaguez Salinas, School of International Relations, USC Dornsife College of Letters, Arts and Sciences (January 2015 – May 2018)
- Member Dissertation Committee, Zheng Yang, Department of Civil and Environmental Engineering (July 2014 – June 2016)
- Member Dissertation Committee, Ali Ghahramani, Department of Civil and Environmental Engineering (August 2013 – December 2016)
- Member Thesis Committee. Erroll Southers, DPPD, USC Price School of Policy and Planning (August 2011 - August 2013)

POSTGRADUATE SCHOLAR SPONSOR

- Nicole Sintov, Ph.D., 2013 – 2015
- Elizabeth Lennon, Ph.D., 2011-2013

PATENTS

- Human-Building Interaction (HBI) Framework for Personalized Comfort Driven System Operations in Office Buildings, Disclosure filed, Application Number 61/789,810, USC File Number 13-308, Patent application under review, March 2014

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- Probabilistic risk assessment and management system for critical infrastructure protection, Disclosure filed, USC File Number 2014-143, December 2013
- System and Method of Adjusting Audiovisual Content to Improve Hearing, **Patent No. 8,239,768**. Co-holder, 7 August 2012
- System and Method of Adjusting Audiovisual Content to Improve Hearing, **Patent No. 8,020,102**. Co-holder, 13 September 2011

MEDIA INTERVIEWS

- 5 Sep 2017 BYURadio – Top of the Mind with Julie Rose
Topic – Hackers Take on Hollywood
Live radio interview
<https://www.byuradio.org/episode/113703bc-5670-4761-b7ec-cadc7d30d720?playhead=3088&autoplay=true>
- 11 Aug 2017 Bloomberg News – Gerry Smith (Media Reporter)
Topic – Hackers Are Threatening the Way That Hollywood Does Business
<https://www.bloomberg.com/news/articles/2017-08-11/hackers-are-threatening-the-way-that-hollywood-does-business>
- 12 May 2017 Hollywood Reporter – Tatiana Siegel (Senior Film Writer)
Topic – Ransomware in Hollywood
<http://www.hollywoodreporter.com/news/fbi-gives-hollywood-hacking-victims-surprising-advice-pay-ransom-1001515>
- 21 Feb 2017 Fox-11 (Los Angeles) – Zohreen Adamjee
Topic – “How to keep yourself safe from ‘privacy poachers’”
Aired: Week of 21 February 2017
<http://www.foxla.com/news/local-news/237302383-story>
- 15 Nov 2015 KGET TV-17 (Bakersfield) – Kiyoshi Tomono
Topic – “Security of the Power Grid”
Aired: 15 Nov 2015 in local Bakersfield market
<http://www.kerngoldenempire.com/news/documents-show-pge-substations-are-at-risk-for-terrorist-attacks>
- 15 Jun 2015 NPR All Tech Considered – Sam Sanders
Topic: “Emoji Passwords Could Be Coming Your Way. Is This a Good Thing?”
<http://www.npr.org/sections/alltechconsidered/2015/06/15/414742418/emoji-passwords-could-be-coming-your-way-is-that-a-good-thing>
- 5 Feb 2015 USC Annenberg TV – Alyssa Nakamoto (audio interview)
Topic: Anthem Data Breach

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- 22 Dec 2014 Associated Press – Tami Abdollah, Law Enforcement Reporter
Topic: Sony Picture Studios Hack and Attribution to North Korea
- 17-18 Dec 2014 KCAL-9, KCBS-2, FOX-11, KNX-1070 Talk Radio and KPCC
Take Two
Topic: “Sony Picture Studios decision to pull showing of ‘The Interview’ – terrorism threat”
- 1 August 2014 ARD German Radio (Wolfgang Stuflesser – Correspondent)
Topic: “Views on challenges with the US-EU Safe Harbor Act”
- 17 July 2014 NBC/Universal (Mary Harris - Producer)
Topic: “Downing of Malaysia Airlines MH17”
- 30 June 2014 KPCC Interview (Sanden Totten)
Topic: “Smart Grid Regional Demonstration Project (SGRDP)”
- 25 April 2014 KPCC Interview (Erica Aguilar)
Topic: “USC/LAPD/LASD Cyber Certificate for detectives”
- 4 March 2014 KTLA Interview
Topic: “Phishing attacks”

VIDEOS

- May 2015 LADWP Smart Grid Series (Vol: 1-6):
https://www.youtube.com/results?search_query=ladwp+smart+grid

LECTURES

- 28 October 2019 Course: PPD 683 (Annual Lecture)
Institution: University of Southern California, Sol Price School of Public Policy
Title: Intelligence Community, Who, What, When and Why?
- 18 October 2019 Course: Safe Communities Institute – Fall Semester
Institution: University of Southern California, Sol Price School of Public Policy
Title: Open Source Intelligence and the Deep Web
- 3 June 2019 Course: Safe Communities Institute – Executive Leadership Program (ELP)
Institution: University of Southern California, Sol Prices School of Public Policy
Title: Open Source Intelligence and the Deep Web
- 2 May 2019 Course: Safe Communities Institute – Spring Semester

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- Institution: University of Southern California, Sol Price School of Public Policy
Title: Open Source Intelligence and the Deep Web
- 13 Dec 2018 Course: Safe Communities Institute – Fall Semester
Institution: University of Southern California, Sol Price School of Public Policy
Title: Open Source Intelligence and the Deep Web
- 22 October 2018 Course: PPD 683 (Annual Lecture)
Institution: University of Southern California, Sol Price School of Public Policy
Title: Intelligence Community, Who, What, When and Why?
- 23 Jun 2018 Course: Safe Communities Institute Executive Leadership Program
Institution: University of Southern California, Sol Price School of Public Policy
Title: Intelligence Community, Who, What, When and Why?
- 23 Jan 2018 Course: Safe Communities Institute – Spring Semester
Institution: University of Southern California, Sol Price School of Public Policy
Title: Open Source Intelligence and the Deep Web
- 23 October 2017 Course: PPD 683 (Annual Lecture)
Institution: University of Southern California, Sol Price School of Public Policy
Title: Intelligence Community, Who, What, When and Why?
- 19 Oct 2017 Course: Safe Communities Institute – Fall Semester
Institution: University of Southern California, Sol Price School of Public Policy
Title: Open Source Intelligence and the Deep Web
- 1 Aug 2017 Course: Executive Program in Counter-Terrorism
Institution: University of Southern California
Location: DHS Learning Center, Washington DC
Title: Intelligence Community and the Deep Web
- 29 June 2017 Course: Chevron-USC Frontier of Energy Resources Camp 2017
Institution: University of Southern California, Viterbi School of Engineering
Title: Smart Grid Research
- 14 June 2017 Course: Safe Communities Institute – Summer Executive Program
Institution: University of Southern California, Sol Price School of Public Policy

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- Title: Open Source Intelligence and the Deep Web
- 9 June 2017 Title: Cyber Terrorism
USD Cyber Security Executive Program
University of San Diego
San Diego, CA
- 4 May 2017 Course: Safe Communities Institute
Institution: University of Southern California, Sol Price School of
Public Policy
Title: Open Source Intelligence and the Deep Web
- 31 January 2017 Guest lecture: Judge David O' Carter Court (Indonesian senior law
enforcement)
Title: Terrorist Use of the Internet: The Dark Web and Data
Mining Social Media
USC Price School of Policy and Planning, Los Angeles, CA
- 25 January 2017 Guest lecture: Judge David O' Carter Court (Malaysian Supreme
Court visit to US)
Title: Terrorist Use of the Internet: The Dark Web and Data
Mining Social Media
US District Court House (Ronald Reagan), Santa Ana, CA
- 8 December 2016 Course: Safe Communities Institute
Institution: University of Southern California, Sol Price School of
Public Policy
Title: Social Media Investigation Basics
- 6 December 2016 Guest lecture: Judge David O' Carter Court (Indonesian Supreme
Court visit to US)
Title: Terrorist Use of the Internet: The Dark Web and Data
Mining Social Media
US District Court House (Ronald Reagan), Santa Ana, CA
- 24 October 2016 Course: PPD 683 (Annual Lecture)
Institution: Sol Price School of Public Policy, University of
Southern California,
Title: Intelligence Community, Who, What, When and Why?
- 2 Aug 2016 Course: Executive Program in Counter-Terrorism
Institution: University of Southern California
Title: Intelligence Community and the Deep Web
- 4 May 2016 Course: Safe Communities Institute

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	Institution: University of Southern California, Sol Price School of Public Policy Title: Social Media Investigation Basics
12 November 2015	Course: Safe Communities Institute Institution: University of Southern California, Sol Price School of Public Policy Title: Social Media Investigation Basics
26 October 2015	Course: PPD 683 (Annual Lecture) Institution: University of Southern California, Sol Price School of Public Policy Title: Intelligence Community, Who, What, When and Why?
5 Oct 2015	Course: Intermediate Cybercrime Investigation Institution: University of Southern California, Los Angeles Police Department and Los Angeles Sheriff's Department Title: Intermediate Social Media Investigation
18 Aug 2015	Course: Executive Program in Counter-Terrorism Institution: University of Southern California Title: Intelligence Community – What, When, Where, How and Why?
29 July 2015	Course: Basic Cybercrime Investigation Institution: University of Southern California, Los Angeles Police Department and Los Angeles Sheriff's Department Title: Social Media Investigation Basics
24 June 2015	Course: Basic Cybercrime Investigation Institution: University of Southern California, Los Angeles Police Department and Los Angeles Sheriff's Department Title: Social Media Investigation Basics
26 May 2015	Course IR 440 (USC-SMU Joint Course) Institution, University of Southern California, School of International Relations Title: Cyber Security and USC-Asian Policy Considerations
3 November 2014	Course: PPD 683 (Annual Lecture) Institution: University of Southern California, Sol Price School of Public Policy Title: Intelligence Community
9 Sep 2014	Course: ISE 651 Institution: University of Southern California Title: USC Smart Grid Project

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| 5 Aug 2014 | Course: Executive Program in Counter-Terrorism
Institution: University of Southern California
Title: Intelligence Community – What, When, Where, How and Why? |
| 17 July 2014
15 May 2014 | Course: Basic Cybercrime Investigation
Institution: University of Southern California, Los Angeles Police Department and Los Angeles Sheriff's Department
Title: Social Media Investigation Basics |
| 28 October 2013 | Course: PPD 683 (Annual Lecture)
Institution: University of Southern California, Sol Price School of Public Policy
Title: Intelligence Community |
| 31 July 2013 | Course: Executive Program in Counter-Terrorism
Institution: University of Southern California
Title: Intelligence Community |
| 31 October 2012 | Course: PPD 683 (Annual Lecture)
Institution: University of Southern California, Sol Price School of Public Policy
Title: Intelligence Community |
| 25 October 2012 | Course: CE 515
Institution: University of Southern California, Viterbi School of Engineering
Title: Demand Response & Customer Behavior – Research in Sustainability and Energy Management |

BOOKS REVIEWED

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| Dec 2012 | “Beyond the Storms, Strengthening Security & Resilience in the 21 st Century”, by Dane S. Egi, Johns Hopkins University, Applied Physics Laboratory |
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BRIEFINGS

Available on request, but I speak frequently to government and academic audiences

PROFESSIONAL SOCIETIES

- Institute of Electrical and Electronics Engineers (IEEE), 1990 to present
- Society of Risk Analysis (SRA), 2009 to present
- Association for Computing Machinery (ACM), 1990 to 2002
- Audio Engineering Society (AES), 1995 to 2000

PROFESSIONAL HONORS AND AWARDS

- Meritorious Service Award, Information Sciences Institute, University of Southern California, Marina del Rey, CA, 2003
- Member of R&D Sony Pictures Entertainment Team that won Academy Award for Scientific Achievement for Sony Dynamic Digital Sound (SDDS), Los Angeles, CA, 1996
- President, Student Chapter of the Society of Automotive Engineers, University of California, Los Angeles, CA, 1995-1996
- Outstanding Graduating Senior in Engineering Mathematics, Colorado School of Mines, Golden, CO, 1983
- Colorado School of Mines Board of Trustees Scholarship, Colorado School of Mines, Golden, CO, 1979 – 1983

PROPOSALS/PROJECTS REVIEWED

- US Department of Energy, Office of Energy Efficiency & Renewable Energy, Building Technologies Office – Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) – 2019, FOA Evaluation Review, Washington DC, 9-10 September 2019
 - Reviewed eight 3-year proposals and participated in two-day evaluation review of all (40+) proposals submitted to the FOA.
- US Department of Energy, Office of Energy Efficiency & Renewable Energy, Building Technologies Office – Laboratory Proposal Merit Evaluation, webinar, 6 June 2019
 - Reviewed four 3-year lab-only proposals for funding research into controls and sensors
- US Department of Energy, Office of Energy Efficiency & Renewable Energy, Building Technologies Office – Peer Review, Washington, DC, 15-18 April 2019
 - Member of review panel (portfolio reviews)
- US Department of Energy, Office of Energy Efficiency & Renewable Energy, Building Technologies Office – Peer Review, Washington, DC, 30 April – 3 May 2018
 - Member of review panel (6 projects)
- US Department of Energy, Office of Energy Efficiency & Renewable Energy, Building Technologies Office – Peer Review, Washington, DC, 13-16 March 2017
 - Member of review panel (10 projects)
- US Department of Energy, Office of Energy Efficiency & Renewable Energy, Building Technologies Office – Lab Merit Review, Washington, DC, 7-8 April 2016
 - Member of review panel (6 projects)
- US Department of Energy, Office of Energy Efficiency & Renewable Energy, Building Technologies Office – Peer Review, Washington, DC, 14-16 April 2015
 - Member of review panel (6 projects)
- National Center for Food Protection and Defense (NCFPD), February 2014

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- Member of Research Evaluation and Advisory Panel (REAP)
- DHS Center of Excellence
- University of Minnesota
- Three proposals
- National Center for Risk and Economic Analysis of Terrorism Events (CREATE), May 2012
 - DHS Center of Excellence
 - University of Southern California
 - Three proposals
- National Center for Foreign Animal and Zoonotic Diseases (FAZD), January 2011
 - Member of Research Evaluation and Advisory Panel (REAP)
 - DHS Center of Excellence
 - Texas A&M University
 - Eight proposals
- National Center for Food Protection and Defense (NCFPD), June 2010
 - Member of Research Evaluation and Advisory Panel (REAP)
 - DHS Center of Excellence
 - University of Minnesota
 - Eight proposals
- National Center for Food Protection and Defense (NCFPD), August 2009
 - DHS Center of Excellence
 - University of Minnesota
 - Six proposals
- National Center for Food Projection and Defense (NCFPD), August 2007
 - DHS Center of Excellence
 - University of Minnesota
 - Two proposals

UNIVERSITY SERVICE

2015 – Present	Member, Intelligence Committee - Funding Opportunities Review Team, ISI
2006 – Present	Member, Planning Committee, CREATE Executive Program on Counter-Terrorism
2006	Member, ISI project management committee

COMMUNITY SERVICE

- Secretary, Board of Directors and Officer, Excelsior Condominiums Homeowners Association, Brentwood (Los Angeles), CA, Jan 2019 to present
- Chair, Brentwood Presbyterian Church Finance and Endowment Committees (6-12 members), 2019 to present
 - Member of the Session (Board of Directors)
 - \$1.5M/year operating budget

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- \$2.3M Endowment portfolio
- Chair, Brentwood Presbyterian Church Stewardship Committee (6 members), 2018 to 2019
 - Member of the Session (Board of Directors)
 - \$1M/year stewardship campaign
 - Member of finance committee
- Volunteer, Compton HS Science Day, 2014 to present
- Volunteer, LAUSD Career Day, 2008 to present
 - STEM outreach initiative to 5th/6th grade minority students
- Member and Co-founder WPC PATH (People Assisting the Homeless) **Adopt-A-Meal Program**, Los Angeles, 2005 – Present
 - 50K+ meals prepared and served
- Member, Westwood Presbyterian Church Investment/Endowment Task Force, 2015 to 2016
- Member, Westwood Presbyterian Church Nominating Committee, 2014-2016
- Chair, Westwood Presbyterian Church Finance Committee (11 members), 2011 to 2014
 - Treasurer and Chief Financial Officer
 - Chair, Investment sub-committee
 - Member of the Session (Board of Directors)
 - \$11M+ investment portfolio (real estate and equities)
 - \$1M+ annual budget
- Volunteer, UCLA Masters' Swimming, 1999 to present
 - Timer at swim events
- Co-Chair, Westwood Presbyterian Nominating Committee (9 members), 2009 to 2010
- Chair, Westwood Presbyterian Church Pastor Transition Committee (14 members). Los Angeles, California, 2009 to 2010
- Chair, Congregational Life Committee, Westwood Presbyterian Church, Los Angeles, California, 2008 to 2010
- Co-Chair, Westwood Presbyterian Church Homecoming Planning Committee, Los Angeles, California, 2008
- Church Elder, Westwood Presbyterian Church, Los Angeles, California, 2007 to 2015
- Community Outreach Committee, Westwood Presbyterian Church, Los Angeles, 2007 to 2009
- Congregational Life Committee, Westwood Presbyterian Church, Los Angeles, 2007 to 2009
- Member Pastoral Succession Committee, Westwood Presbyterian Church, Los Angeles, 2007
- Moderator, Board of Deacons, Westwood Presbyterian Church, Los Angeles, 2005 – 2006
- Member, Board of Deacons, Westwood Presbyterian Church, Los Angeles, 2004 - 2006