# APPLICATION PACKAGE
## of

## Prasant Mohapatra

### for the position of

## Provost and Executive Vice President for Academic Affairs
## University of South Florida

## CONTENTS:

## 2.  EDUCATION AND PROFESSIONAL EXPERIENCE

2018 --                    Vice Chancellor for Research,
                           University of California, Davis

2016 --  2018              Dean of Graduate Studies
                           Vice-Provost of Graduate Education
                           University of California, Davis

2014 --  2016              Associate Chancellor,
                           University of California, Davis

2013 --  2014              Interim Vice-Provost and CIO,
                           University of California, Davis, CA

2007 --  2013              Chair, Computer Science Department,
                           University of California, Davis, CA

2009 --  2013              Tim Bucher Family Endowed Chair,
                           University of California, Davis, CA

2019 --                    Distinguished Professor, Computer Science Department,
                           University of California, Davis, CA

2003 --  2018              Professor, Computer Science Department,
                           University of California, Davis, CA

2012 – 2013                World Class University (WCU) Visiting Professor,

| 1998-1999 | Associate Professor, Electrical and Computer Engineering Department<br>Iowa State University, Ames, IA 50011 |
| --- | --- |
| May-July, 1998 | Visiting Scientist, Panasonic Information and Networking Technologies<br>Laboratory, Panasonic Technologies Inc., Princeton, New Jersey |
| 1993-1998 | Assistant Professor, Electrical and Computer Engineering Department<br>Iowa State University, Ames, IA 50011 |

## EDUCATION:

| | | |
| --- | --- | --- |
| Ph.D., Computer Engineering | Pennsylvania State University, University Park, PA | 1993 |
| M. S., Mathematics | University of Rhode Island, RI | 1989 |
| B. S., Electrical Engineering | National Institute of Technology, Rourkela, India | 1987 |

## LEADERSHIP TRAINING:

Berkeley Executive Leadership Program, UC Berkeley, 2018
Provost Leadership Development Program, UC Davis, 2012

### 3. HONORS AND AWARDS

Fellow of AAAS, 2013

Fellow of the IEEE, 2010

Distinguished Professor of UC Davis, 2019

Certificate of Recognition for Research Response to Community Crisis, APLU, 2021.

Outstanding Engineering Alumni Award, Pennsylvania State University, 2008

Outstanding Engineering Faculty Research Award, College of Engineering, UC Davis, 2011.

Distinguished Alumnus Award, National Institute of Technology, Rourkela, India, 2015

Biju Patnaik Lifetime Scientific Excellence Award, Government of Odisha, India, 2015

HP Labs Innovation Award, 2011, 2012, 2013

Editor-in-Chief, IEEE Transactions on Mobile Computing, 2014-17

Paper published in ICCD-2000 was selected among the four most influential work during the first 30 years of ICCD conference (A Retrospective presented at the 30th ICCD-2012)

Best Paper Awards:
- IEEE CNS, 2014 (Best Paper Runner Up)
- IFIP Networking, 2014
- ACM BodyNets, 2013
- IEEE ICCCN, 2013
- International Symposium on Wireless Personal Multimedia Communications, 2011.
- IEEE Wireless Mobile Computing (WiMob) Conference, 2009

World Class University (WCU) Visiting Professor, KAIST, Korea, 2012-13

Mentor, Award for Excellence in Postdoctoral Research, 2015 (Dr. Parth Pathak).

Mentor, Award for Excellence in Postdoctoral Research, 2012 (Dr. Amit Pande).

Mentor, Award for Excellence in Postdoctoral Research, 2011 (Dr. Kai Zeng).

Advisor, Best Graduate Researcher Award, Computer Science Department, UC Davis, 2013 (Student: Xinlei Wang)

Advisor, Best Graduate Researcher Award, Computer Science Department, UC Davis, 2012 (Student: An Chan)

Advisor, Best Doctoral Dissertation Award from the College of Engineering, 2007 (Student: Chao Gui)

Outstanding Graduate Research Award, Pennsylvania State University, 1993

(strategies, financial, and operations) more than 20 campus-wide multidisciplinary research centers including the Organized Research Units (ORUs).

**Major Accomplishments:**

*Facilitating in increasing the external funding for research:* During the last fiscal year, the external funding for UC Davis exceeded $1B for the very first time. During my time as the VCR, the level of funding has grown from about $750M to $1.07B. This growth was realized through engagement in various new initiatives, facilitation of cross-campus collaborations, and targeted investments.

*Creation of new multi-disciplinary research centers:* Global challenges need collaborative efforts across multiple disciplines to produce impactful research. More and more federal funding is aligning to this trend and the research community is moving toward this practice. I have been a strong promoter of creating research center and institutes that bring in faculty and researchers from a broad set of disciplines to work on challenges that address issues having broader societal and global impacts. I created four new multidisciplinary centers with investments of about $1M each. The activities leading to the final selection of the topics brought 750 faculties and researchers working together from all over the campus.

*Promoting collaborative and large-scale impactful projects:* I have worked very closely with faculty in helping them work collaboratively to seek external funding for large collaborative research (eg. NSF Center for AI in Food Systems). As a catalyst, I use my own experiences in such activities. I have actively worked with faculty group in promoting a culture for large collaborative and impactful research. I organized five Interdisciplinary Research Catalyst (IRC) Conversations workshops on thematic areas. The investment of about $200K for these activities resulted in over $15M in new award funding. In addition, I also created a Faculty Fellows program to help faculty pursue large interdisciplinary grants they otherwise may not have enough time to devote to for proposal development.

*Consolidation of animal care programs:* UC Davis has one of the largest animal care programs in the nation. The cost and operational challenges were quite overwhelming. The teaching and research animal care was under the Administration and Operations unit of campus. The mouse biology program was under th( succ.001 Tceo)-1.7natio-5.4(w)-6339multi-disc

*National and UC System Level Activities*
Working with the 9 other VCRs across the system has been a very rewarding experience. I have participated in several activities that were coordinated through the "power of ten." It

leadership in formulating strategic plans for building the vision of the University of 21$^{st}$ century.

**Interim Vice-Provost and Campus Chief Information Officer (2013 – 2014)**

In this role, I served as the chief of the Information and Educational Technology (IET) for

## 5. ENGAGEMENT IN DIVERSITY, EQUITY, AND INCLUSION

**Undergraduate Research:**

As a faculty member in computer science, I was engaged in mentoring undergraduate research assistants from underrepresented minority (URM) populations. I participated in an NSF-funded project to help the URM students get more exposure to faculty research through active participation.

**Graduate Program:**

I have made significant contribution related to diversity, equity, and inclusion for graduate programs. As the chair of graduate group in computer science, I focused on recruiting URM students through proactive methods by participating in national programs and attending focused gatherings. I also participated in various panels promoting the importance of diversity, equity, and inclusion on graduate programs.

As the dean of graduate programs, I increased the emphasis on pipeline programs like McNair and LEEDS programs. During my term as the Dean, there was a significant rise in the percentage of URMs in the graduate programs at UC Davis. Working in collaborations with faculty across the UC systems, I instituted a bridge-to-doctorate program for URM students. This effort was funded by the NSF was yielded excellent results, especially for our STEM graduate programs.

A similar effort was initiated by me to promote URM enrolments in humanities, arts, and social sciences. Through a $1M+ grant from the Mellon Foundation, I worked with a multi-campus team for revisiting the graduate admission process and studied its impact on success for URM students.

**Faculty Recruitment:**

As a department chair, I worked actively with campus-level initiatives for promoting diversity in recruitment of engineering faculty. Through an NSF-funded ADVANCE program, I was successful in recruiting a starred Latina faculty member in the department of computer science. I participated in various programs related to addressing the implicit biases in faculty recruitment process – that stays as a barrier to diversity, inclusion, and equity efforts.

During my time as the Graduate Dean, I initiated an activity – ENVISION – through which we brought PhD and Postdoctoral students for 2-day campus visit and inspire them for pursuing career in academics. It was not targeted for UC Davis recruitment but for general career awareness. More than 200 scholars participated from a broad range of disciplines.

**Faculty Research:**

At present, I am in discussion with our vice chancellor for diversity, equity, and inclusion for creating the Institute for Diversity, Equity, and Advancement (IDEA) for promoting and enhancing research activities in the areas of diversity and equity, and encouraging broad participation amongst our faculty.

**6. COMMUNITY ENGAGEMENT AND GOVERNMENTAL RELATIONS:**

Engaging with the local and regional community has always been my priority. Universities and local/regional communities can leverage each other's resources (intellectual, diverse, and human factors) in order to grow symbiotically. All top universities strive to impact the local and regional communities and likewise the local and regional communities provide immense support to their universities. I am citing two of our ongoing efforts where I collaborate and contribute with my leadership roles.

**Healthy Davis Together:** From the very beginning of the pandemic, we (our leadership team, which I am a part of) made a conscious decision that we need to fight against the pandemic without any distinction between UC Davis and the City of Davis. With the help of some of our donors, we devised a plan to fight the community health as well as economic challenges together. We provided free testing, education, and contact tracing for the entire community in addition to the campus. Additionally, we provided economic help for small businesses for the city of Davis while supporting all the needs of our campus community. The payback was huge; the story was covered by NYT and appreciated nationally. The positivity rate of infection of the City of Davis and the UC Davis stayed under 1%, while the State's positivity rate hovered around 10%.

**Aggie Square:** In collaboration with the city of Sacramento, we are in the planning process to build our technology and entrepreneurship hub – called Aggie Square. As a member of the Steering Committee, I am taking a leading role in various aspects of the plan, design, and implementation of the project. Similar to Tech Square in Atlanta, this ongoing effort is facilitated through a private-public partnership that will have a local/regional impact exceeding a $1B. The site for Aggie Square is strategically chosen in the most underprivileged area of Sacramento. Thus the regional economic impact will be huge, while building up our contributions in our community.

**Governmental Relations:** I have been engaged in governmental relations both at the State as well as Federal levels for more than 6 years in my role as a Dean and as Vice Chancellor. Periodically, I have travelled to

**7. FUND RAISING AND DONOR STEWARDESS:**

I have been engaged in fundraising and stewarding donors for the last 15 years. I have attended a few professional training programs during these years. I will highlight a few of my successes in fundraising; some of them are ongoing or nearing successes.

o   Led a very recent effort for securing $24M for our School of Medicine from leftover funds from a legal settlement. It will be invested on research addressing women's health disparities in underprivileged communities. I had to highlight our ongoing efforts in the School of Medicine in convincing the settlement advocates and judge to get the funding gifted to UC Davis.

o   I have working very closely with a professional sports team owner for a few years, and am very close to securing a $5M gift for establishing an AI Institute for application areas of health and agriculture.

o   I was instrumental in working with Prem Jain and the establishment of the $2.0M Presidential Endowed Chair in Engineering.

o   Leading the effort for the creation of the [e Tf12.6885   peTc 0 TD.duh3 0 TD.0008 Tcr8 th

## 8. ENTREPRENUERSHIP AND INDUSTRY-RELATED EXPERIENCE:

### CONSULTING ACTIVITIES

| | |
|---|---|
| January 2021 - | Advisory Board Member, Spearix, Inc. |
| June 2015 - | Advisory Board Member, Seceon Networks, Inc. |
| Jan. 2010 – | Founder, Airpackets, LLC |
| Aug. 2011 – Dec. 2011 | Consultant, AT&T Labs |
| Jul. 2010 – Dec. 2010 | Consultant, AT&T Labs |
| Dec. 2007 – Mar. 2008 | Consultant, Siemens |
| June 2004 – Oct. 2004 | Consultant, Siemens |
| Aug. 2003 – Sept. 2003 | Consultant, Intel Corporation |
| June 2000 – July 2000 | Consultant, Intel Corporation |
| Jan. 2000 – May 2000 | Consultant, Panasonic Technologies |

### INDUSTRIAL SPONSORS AND COLLABORATORS (CURRENT AND PAST)

AT&T
ARM Research
EMC Corporation
Hewlett Packard
Intel Corporation
NEC Corporation
Panasonic
Rockwell International
Siemens
Raytheon-BBN
NICTA, Australia
Bosch Corporation

### START-UP COMPANIES

Co-Founder, Mapiz, Inc. (2009-2014) Mapiz was a start-up company involved in location-based services for smartphones and other devices. It was acquired in 2014. I was involved in formulating the vision that defined the technology as well as the business plan.

Chief Technology Officer, Polyphasic Corporation (2000-2001): Polyphasic Corporation was a start-up company formed in East Lansing, Michigan where I served as the CTO.

### BOARD MEMBERSHIPS AND ADVISORY COMMITTEE

CITRIS Advisory Board, UC Berkeley, CA, USA (2020 - )
Bay Area Science and Innovation Consortium (BASIC), CA, USA (2018 - )
Joint BioEnergy Institute (JBEI), CA, USA (2018 - )
California Mobility Center, CA, USA (2019 - )
SRM University, AP, India (2018 - )
GD Goenka School, Bhubaneswar, India (2017 - )
National Commission on Innovation & Competitiveness Frontiers, USA (2019 - )

## 9. INTERNATIONAL EXPERIENCE:

**Educational**

I have taught in several countries including Italy, India, Australia, South Korea, Thailand, and Spain. These efforts included short courses to semester long courses. These experiences exposed me to learn about the learning behaviors of students from a varied culture. In addition, I had a learning experience of interacting with academic colleagues in all of these countries.

Advisor and Active Member of Indo-US Consortium of Engineering Education (IUCEE). IUCEE is a not-for-profit organization engaged in training the teachers of second and third tier engineering colleges in India. IUCEE has now expanded its scope to Brazil and other Asian countries.

I have participated in the UC Education Abroad program in South Korea. I have taught summer courses over a three-year period at Yonsei University.

**Research**

I have participated in collaborative and funded projects in Italy, India, Australia, and Singapore.

I have participated in European Union (EU) funded large-scale research projects.

I have worked for several months as a visiting scientist in Singapore, Korea, Australia, and India.

Member of the Advisory Board, Information Technology Research Academy, Government of India

I have served as an advisor/panelist/evaluator for:
- o   Science Foundation of Ireland (SFI)
- o   Qatar National Research Foundation (QNRF)
- o   Hong Kong Research Council (HKRC)
- o   Singapore A*STAR Program
- o   Australia ARC Program
- o   Greece Research Council

**Leadership and Outreach**

I have been fortunate enough to have travelled in more than 50 different countries around the world. These travels have provided me a very enriching experience of multiple cultures and a view of broad international aspects, issues, and environments.

I have given technical presentations and interacted with people in academia and industry in more than 35 different countries. These activities have provided a broad understanding of academics as well as industry collaborations in the international domain. The broad range of international experience will help me in enhancing and establishing relationships, exploring new ventures, and creating partnerships in future.

Collaborated with groups from Vietnam, India, and Japan in fostering student exchange program with the Computer Science department at UC Davis.

**10. GRANTS AND CONTRACTS (Subset Selected out of 75)**

P. Mohapatra (PI), $414,000, Army Research Office, "Millimeter-wave Networking in Transient Topologies," 2022-24.

P. Mohapatra (Co-PI), $360,000, Department of Energy, "Cyber Innovation to Secure Manufacturing," 2020-22.

P. Mohapatra (Co-PI), $48.2M, Army Research Laboratory, Cybersecurity Research Alliance, "Models for Enabling Continuous Reconfigurability of Secure Missions," 2013-22. (PI: P. MacDaniel, Co-PIs: K. Levitt, F. Wu, T. LaPorta, T. Jaeger, S. Krishnamurthy, I. Neamtiu, J. Camp, B. Bertenthal, L. Bauer, N. Christin, C. Gonzalez)

P. Mohapatra (PI), $1,195,000, Andrew W. Mellon Foundation, "Alliance for Multi-campus Inclusive Graduate Admissions," 2018-22.

P. Mohapatra (PI), $1,075,000, National Science Foundation, "California LSAMP Bridge to Doctorate Activity," 2016-18.

P. Mohapatra (PI), $200,000, Army Research Office, "Millimeter Wave Human Tracking and Activity Monitoring," 2016-17.

P. Mohapatra (PI), $575,000, Army Research Office, "Advanced Security Games for Cyber-Physical Systems," 2015-19. (Co-PI: Ness Shroff).

P. Mohapatra (Co-PI), $992,746, National Science Foundation, "CC-NIE Integration: Improved Infrastructure for Data Movement and Monitoring," 2012-14. (PI: M. Bishop)

P. Mohapatra (Co-PI), $500,000, National Science Foundation, "Towards a User-Centric Battery Management System for Smartphones," 2013-16. (Co-PI: Srikanth Krishnamurthy)

P. Mohapatra (PI), $75,000, Hewlett Packard Company, "Location Based Communications and Services," 2013-14.

P. Mohapatra (PI), $150,000, National Science Foundation, "Deep Network Inspection," 2012-13.

P. Mohapatra (PI), $95,000, Hewlett Packard Company, "Location Based Communications and Services," 2012-13.

P. Mohapatra (PI), $119,500, US Army Research Laboratory, "Trusted Networks," 2011-12.

P. Mohapatra (PI), $195,000, US Army Research Office, "Mobility and Security in Wireless Networks," 2011-12.

P. Mohapatra (PI), $125,000, National Science Foundation, "CIFellows Project," 2011-12.

P. Mohapatra (PI), Total $35.5M, $7,000,000 (UC Davis Share), Army Research Laboratory, Collaborative Technology Alliance (CTA), "Quality of Information Cs 20.5956 4.4( $)4(7)-1.4(,00)4(0)-1.4(

P. Mohapatra (Co-PI), $65,000, Intel Corporation, "SWiM: Scalable Wireless Mesh Networks," 2008-09 (PI: X. Liu).

P. Mohapatra (PI), $200,000, National Science Foundation "Cross-layer Design for Streaming Video in Multihop Wireless Mesh Networks" 2008-11.

P. Mohapatra (PI), $20,000, Intel Corporation "Diversity Research Program" 2008-09.

P. Mohapatra (Co-PI), $65,000, Intel Corporation, "Scalable Enterprise Mesh Networks," 2007-08 (PI: X. Liu).

P. Mohapatra (PI), $290,000, National Science Foundation, "Cooperative Security Mechanisms for DNS" 2007-10.

P. Mohapatra (PI), $280,000, National Science Foundation, "QuRiNet: A Wide-Area Outdoor Mesh Test-bed" 2007-11 (Co-PIs: X. Liu, V. Boucher).

P. Mohapatra (PI), $50,000, Intel Corporation, "Co-operative DNS Security" 2007-08.

P. Mohapatra (PI), $6,250,000, Department of Defense (Army Research Office), "ARSENAL: A Cross-Layer Architecture for Secure Resilient Tactical Mobile Ad Hoc Networks," 2006-07 (Co-PIs: K. Levitt, F. Wu, S. Krishnamurthy, M. Falutsos, L. Swindlehurst, M. Jensen, S. Kasera, T. LaPorta, G. Cao, P. Krishnamurthy, D. Tipper, J. J. Garcia-Luna-Aceves), 2007-2012.

P. Mohapatra (Co-PI), $70,000, Intel Corporation, "Management of Wireless Mesh Networks" 2006-07 (PI: C. N. Chuah).

P. Mohapatra (Co-PI), $65,000, Intel Corporation, "Scalable Enterprise Mesh Networks," 2006-07 (PI: X. Liu).

P. Mohapatra and G. Manimaran, $360,000, National Science Foundation, "DiffServ-Aware Multicasting," 2003-2006.

P. Mohapatra and L. N. Bhuyan, $441,645, National Science Foundation, "Scalable Software Systems for Large Internet Servers," 2003-2007.

P. Mohapatra, Hewlett Packard Corporation, "Research on Mobile Ad Hoc Networks," $82,400, 2002-2004.

P. Mohapatra, National Science Foundation, $175,270, "Efficient Marking Techniques for Differentiated services in the Internet," 2001 – 2004.

P. Mohapatra, $40,000, Intel Corporation, "E-commerce Traffic Characterization and its Impact on Internet Servers," 2000 – 2002.

P. Mohapatra, National Science Foundation, $162,842, "Service Differentiation and Overload Control in Web Servers," July 2000 – June 2003.

**11. PATENTS:**

US Patent Number 10,045,717: *WiFi-Based Person-Identification Technique for use in Smartspaces,* (With P. Pathak and Y. Zeng), August 2018.

US Patent Number 10,347,249: *Energy-Efficient, Accelerometer-Based Hot-word Detection to Launch a Voice-Control System,* (With L. Zhang, M. Wu, L. Xiran, P. Pathak), July 2019.

US Patent Number 9,813,907: *Sensor-Assisted User Authentication,* (With S. Chen, A. Pande), November 2017.

US Patent Number: 9,756,460: *Adaptive Location Perturbation,* (With J. Zhu, K. H. Kim), September 2017.

US Patent Number: 9,733,088: *Signal Space Based Navigation,* (With S. Sen, K. H. Kim, J. Zhu), August 2017.

US Patent Number: 9,408,076: *Sensor-Assisted Biometric Authentication for Smartphones,* (With S. Chen, A. Pande), August 2016.

US Patent Number: 8,965,398: *Bluetooth Beacon Based Location Determination,* (With J. Zhu, K. Zeng, K. H. Kim), February 24, 2015.

US Patent Number: 6,466,978: *Multimedia File Systems Using File Managers Located on Clients for Managing Network Attached Storage Devices*, (With S. Mukherjee and I. Kamel), October 15, 2002.

S. Chen, A. Pande, K. Zeng, and P. Mohapatra, "Live Video Forensics: Source Identification

**Selected Conference Papers (Out of 275+)**

A. Chhabra, A. Sekhari, and P. Mohapatra, "On the Robustness of Deep Clustering Models: Adversarial Attacks and Defenses," NeurIPS, 2022.

T. Gu, Z. Fang, A. Abhishek, H. Fu. P. Hu, and P. Mohapatra, "IoTGAZE: IoT Security Enforcement via Wireless Context Analysis," INFOCOM 2020.

A. Chhabra, A. Roy, and P. Mohapatra, "Suspicion-Free Adversarial Attacks on Clustering Algorithms," AAAI 2020.

H. Fu, Z. Zheng, S. Zhu, and P. Mohapatra, "Keeping Context in Mind: Automating Mobile App Access Control with User Interface Inspection" IEEE INFOCOM, 2019.

A. Goswami, C. Zhai, and P. Mohapatra, "Learning to Rank and Discover for E-commerce Search," International Conference on Machine Learning and Data Mining, 2018.

A. Roy, C. Kamhoua, and P. Mohapatra, "Game-Theoretic Characterization of Collusive Behavior among Attackers," IEEE INFOCOM, 2018.

A. Das, P. Pathak, J. Jee, C. N. Chuah, and P. Mohapatra, "Non-Intrusive Multi-Modal Estimation of Building Occupancy," ACM Conference on Embedded Networked Sensor Systems (SenSys), 2017.

R. Sivaraj, M. Arslan, K. Sundaresan, S. Rangarajan, and P. Mohapatra, "BoLTE: Efficient Network-wide LTE Broadcasting," IEEE Int. Conference on Network Protocols (ICNP), 2017.

Y. Zeng, I. Pefkianakis, K. H. Kim, and P. Mohapatra, "MU-MIMO-Aware AP Selection for 802.11ac Networks," ACM Int. Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), 2017.

P. Hu, P. Pathak, Y. Shen, H. Jin, and P. Mohapatra, "PCASA: Proximity-Based Continuous and Secure Authentication of Personal Devices," IEEE Int. Conference on Sensing, Communication, and Networking (SECON), 2017.

M. Srivatsa, R. Ganti, and P. Mohapatra, "

P. Hu, P. Pathak, X. Feng, H. Fu, and P. Mohapatra, *"ColorBars: Increasing Data Rate of LED-to-Camera Communication using Color Shift Keying,"* ACM Conference on emerging Networking EXperiments and Technologies 2015 (CoNEXT 2015).

T. Dao, I. Singh, H. Madhyastha, S. Krishnamurthy, G. Cao, and P. Mohapatra, "TIDE: A User-Centric Tool for Identifying Energy Hungry Applications on Smartphones," IEEE International Conference on Distributed Computing Systems, 2015.

L. Zhang, P. Pathak, M. Wu, Y. Zhao, and P. Mohapatra, "AccelWord: Energy Efficient Hotword Detection through Accelerometer," ACM MobiSys, 2015.

S. Seneviratne, A. Seneviratne, M. A. Kaafar, A. Mahanti, and P. Mohapatra, "Early Detection of Spam Mobile Apps," International World Wide Web Conference (WWW-2015),

K. Kant, R. Iyer, and P. Mohapatra, "Architectural Impact of Secure Socket Layer on Internet Servers: A Retrospect," IEEE ICCD, 2012, pp. 25-26, Original paper published in ICCD-2000 was selected among the four most influential work during the first 30 years of ICCD conference.

A. Chan, A. Pande, E. Baik, and P. Mohapatra, "Temporal Quality Assessment for Mobile Videos," ACM MOBICOM, 2012.

S. Chen, K. Zeng, and P. Mohapatra, "Efficient Data Capturing for Network Forensics in Cognitive Radio Networks," IEEE International Conference on Network Protocols (ICNP), 2011.

P. McDonagh, C. Vallati, A. Pande, P. Mohapatra, P. A. Perry, E. Mingozzi, "Investigation of Scalable Video Delivery using H.264 SVC on an LTE Network," International Symposium on Wireless Personal Multimedia Communications, 2011. **[Best Paper Award]**

K. Zeng, K. Govindan, D. Wu, and P. Mohapatra, "Identity-Based Attack Detection in Mobile Wireless Networks," IEEE INFOCOM 2011.

K. H. Kim, A. W. Min, D. Gupta, P. Mohapatra, and J. P. Singh, "Improving Energy-Efficiency of Wi-Fi Sensing on Smartphones," IEEE INFOCOM 2011.

Y. Wei, K. Zeng, and P. Mohapatra, "Adaptive Wireless Channel Probing for Shared Key Generation," IEEE INFOCOM 2011.

C. C. Chen, L. Yuan, A. Greenberg, C. N. Chuah, and P. Mohapatra, "Routing-as-a-Service (RaaS): A Framework for Tenant-Directed Route Control in Data Center," IEEE INFOCOM 2011.

L. Cai, K. Zeng, H. Chen, and P. Mohapatra, "Good Neighbor: Ad-Hoc Pairing of Nearby Wireless Devices by Multiple Antennas," Network and Distributed Systems Security Symposium (NDSS), 2011.

K. Tan, D. Wu, A. Chan, and P. Mohapatra, "Comparing Simulation Tools and Experimental Testbeds for Wireless Mesh," IEEE WoWMoM, 2010.

K. Zeng, D. Wu, A. Chan, and P. Mohapatra, "Exploiting Multiple-Antenna Diversity for Shared Secret Key Generation in Wireless Networks," IEEE INFOCOM 2010.

A. Chan, K. Zeng, P. Mohapatra, S. J. Lee, and S. Banerjee, "Metrics for Evaluating Video Streaming Quality in Lossy IEEE 802.11 Wireless Networks," IEEE INFOCOM 2010.

D. Ghosh, A. Gupta, and P. Mohapatra, "Adaptive Scheduling of Prioritized Traffic in IEEE 802.16j Wireless Networks," IEEE Int. Conference on Wireless and Mobile Computer Networks and Communications (WiMob), 2009 **(Best Student Paper Award).**

C. Deccio, C. C. Chen, J. Sedayao, K. Kant, and P. Mohapatra, "Quality of Name Resolution in Domain Name System," IEEE ICNP 2009.

H. Yu, D, Wu, and P. Mohapatra, "Experimental Anatomy of Packet Losses in Wireless Mesh Networks," IEEE SECON 2009.

P. Djukic and P. Mohapatra, "Soft-TDMAC: Software TDMA-based MAC over Commodity 802.11 hardware," IEEE INFOCOM 2009.

D. Gupta, P. Mohapatra, and C. N. Chuah, "Efficient Monitoring in Wireless Mesh Networks: Overheads and Accuracy Tradeoffs," IEEE MASS, 2008.

L. Yuan, C. N. Chuah, and P. Mohapatra, "ProgME:n TAwarsl Prgrammlable N Masureiment

L. Yuan,J.s

## 13. KEYNOTE ADDRESSES AND DISTINGUISHED LECTURES

"Vulnerability in Federated Learning," IEEE Network Architecture and Storage Conference,

"SmartSensing using SmartSensors," ACM Distinguished Lecture, Southwest University, Chongqing, China.

"SmartSensing using SmartSensors," Keynote Address, Joint Conference of IEEE Mobile Cloud, IEEE Could-Based Big Data Summit, and IEEE Symposium on Service-Oriented System Engineering, San Francisco, 2015.

"Privacy in Public and Security without Barriers," Distinguished Lecture, the Croucher Foundation Advanced Study Institute, Hong Kong, 2014.

"Digital Security Through Physical Sensing," Keynote Address, IEEE CNS Workshop on Physical-Layer Methods for Wireless Security, San Francisco, 2014.

"Evaluating Mobile Video and Mobile Applications," Plenary Address, IEEE Conference on Intelligent Sensors, Sensor Networks and Information Processing, Singapore, April, 2014.

"Evaluating Mobile Video and Applications," Keynote Address, International Symposium on IT Convergence Engineering, Pohang, Korea, June 2013.

"Mobile Video Quality and Profiling Smartphone Applications," Distinguished Lecture Series, Kumoh National Institute of Technology, Korea, June 2013.

"Trust in Multihop Wireless Networks," Keynote Address, Hotmesh Workshop, IEEE WOWMOM, San Francisco, CA, June 2012.

"Security and Quality Provisioning in Wireless Networks," Keynote Address, International Conference on Mobile Wireless Networks, Beijing, Dec. 2011.

"Security and Quality Provisioning in Wireless Networks," Distinguished Lecture Series, University of Nebraska-Lincoln, Dec. 2011.

"Securing Wireless Networks by Exploiting Wireless Characteristics," Keynote Address, International Symposium on IT Convergence Engineering, Pohang, Korea, July 2011.

**14. INVITED TALKS AND PANELS (Selected from 100+)**

"Robust Authentication in IoTs," Computer Science Department, University of Sydney, August 2019.

"Smartsensing using SmartSensors," Computer Science Department, Shanghai Jiatong University, March 2019.

"Authentication in IoTs," Computer Science Department, Shanghai Maritime University, March 2019

"Smartsensing using SmartSensors," Computer Science Department, University of Nevada, Reno, April 2017.

"Smartsense and Security using SmartSensors," Cybersecurity Research Center, Old Dominion University, November 2016.

"SmartSensing using SmartSensors," Microsoft Research, Beijing, China, October 2016.

"Game-Theoretic Models for Advanced Persistent Threats," University of Southern California, February 2016.

"Smartsensing using Smartphones," C V Raman College of Engineering, Bhubaneswar, India, December 2015.

"Smartsensing using Smartphones," University of Illinois at Urbana-Champaign, Illinois, October 2015.

"On Exploiting Sensing Elements of Smartphones," Singapore Management University, Singapore, April 2014.

"Evaluating Mobile Video and Applications," Arizona State University, Tempe, AZ, February 2014.

"Evaluating Mobile Video Quality and Applications," University of Edinburgh, Scotland, August 2013.

"Evaluating Mobile Video Quality and Applications," King's College, London, July 2013.

"Evaluating Mobile Video Quality and Applications," Imperial College, London, July 2013.

"Mobile Video Quality and Smartphone App Profiling," ETRI, Korea, May 2013.

"Profiling Smartphone Applications," Future Communications Technology, Seoul, South Korea, May 2013.

"Mobile Video Quality and Smartphone App Profiling," Seoul National University, Korea, April 2013.

"Mobile Video Quality and Smartphone App Profiling," Yonsei University, Korea, April 2013.

"Mobile Video Quality and Smartphone App Profiling," KAIST, Korea, March 2013.

"Mobile Video Quality and Smartphone App Profiling," University of Washington, November 2012.

"Quality and Security in Wireless Networks," Broadcom Corporation, CA, September 2011.

"QuRiNet and Related Research," University of Sydney, Australia, August 2011.

"Securing Wireless Networks by Exploiting Wireless Characteristics," University of New South Wales, Australia, August 2011.

"Securing Wireless Networks by Exploiting Wireless Characteristics," University of Auckland, New Zealand, August 2011.

"Internet of Things," Infocom 2011 Panel Discussion, Shanghai, China, April 2011.

"QuRiNet and Related Research on Wireless Mesh Networks," AT&T Research, San Ramon, CA, April 2010.

"QuRiNet and Related Research on Wireless Mesh Networks," University College Dublin, Ireland, April 2010.

"QuRiNet and Related Research on Wireless Mesh Networks," Hewlett Packard Labs, Palo Alto, CA, March 2010.

"QuRiNet and Related Research on Wireless Mesh Networks," Universidad Carlos III de Madrid, Spain, June 2009.

"QuRiNet Test-bed and Related Research on Resource Management in Wireless Mesh Networks," Department of Computer Science, Trinity College, Dublin, Ireland, October 2008.

"QuRiNet Test-bed and Related Research on Resource Management in Wireless Mesh Networks," Department of Computer Science, Seoul National University, July 2008.

"QuRiNet Test-bed and Related Research on Resource Management in Wireless Mesh Networks," Samsung Institute of Advanced Technology, South Korea, Aug. 2007.

"QuRiNet Test-bed and Related Research on Resource and Quality Management in Wireless Mesh Networks," POSTECH University, South Korea, July 2007.

"Quail Ridge Wireless Mesh Network," University of Padova, Italy, December 2006.

"Quail Ridge Wireless Mesh Network," National ICT Australia, Sydney, August 2006.

"Target Tracking and Surveillance using Sensor Networks," Department of Computer Science and Engineering, The Pennsylvania State University, March 2005.

"Target Tracking and Surveillance using Sensor Networks," Department of Electrical Engineering, University of Pennsylvania, March 2005.

"Sensor Networks: A Sense of the Future," School of Computer Engineering, Nanyang Technological University, Singapore, March 2005.

"Target Tracking and Surveillance using Sensor Networks," University of Sydney, Sydney, Dec. 2004.

"Target Tracking and Surveillance using Sensor Networks," University of Technology, Sydney, Dec. 2004.

"Target Tracking and Surveillance using Sensor Networks," University of New South Wales, Sydney, Dec. 2004.

"Target Tracking and Surveillance using Sensor Networks," School of Computer Engineering, Nanyang Technological University, Singapore, September 2004.

"Target Tracking and Surveillance using Sensor Networks," Institute for Infocomm Research (I2R), Singapore, August 2004.

"Target Tracking and Surveillance using Sensor Networks," School of Computing, National University of Singapore, July 2004.

"Target Tracking Sensor Networks," Nokia Research Center, California, April 2004.

## 15. STUDENTS ADVISING AND MENTORING

**Doctoral Dissertations Completed:**

[43] Zheng Fang, *System-Level Security Analysis of IoTs*, 2022.

[42] Huanle Zhang, *Accelerating Vision Systems on Mobile Devices*, 2020.

[41] Tianbo Gu, *Wireless Security for Supporting Internet of Things*, 2020.

[40] Abhishek Roy, *Multi-Point Bandit Algorithms for Nonstationary Online Nonconvex Optimization*, 2020.

[39] Zhicheng Yang, *Towards 60 GHz Millimeter-wave WLANs and Smart Sensing*, 2019.

[38] Hao Fu, *Detecting Malicious Behaviors in Mobile Applications*, 2019.

[37] Muchen Wu, *Context Determination from Cyber-Physical Sensing*, 2019.

[36] Xiaotao Feng, *Game-Theoretic Models and Behavioral Studies for Cybersecurity*, 2019.

[35] Yunze Zeng, *Enriching WLANs with Advanced Sensing and Networking Applications*, 2018.

[34] Aveek Das, *Context-Aware Information Mining for Wireless Networks*, 2018.

[33] Pengfei Hu, *Performance and Security Enhancements of Wireless Networks through Visible Light and Inaudible Sound*, 2018.

[32] Anjan Goswami, *Machine-Learned Ranking Algorithms for E-Commerce Search and Recommendation Algorithms*, 2018.

[31] Jindan Zhu, *Improving Mobile Services through Multi-Context Analysis*, 2017.

[30] Rajarajan Sivaraj, *Radio Resource Management in Advanced OFDMA-based Cellular Networks*, 2016.

[29] Ningning Cheng, *Investigating Privacy Leakage in Mobile Wireless Networks*, 2016.

[28] Li Zhang, *Optimizing Resource Efficiency of Smartphone Apps through Characterization and Data mining Approaches*, 2015.

[27] Eilwoo Baik, *Enhanced Video Communications over Wireless Networks*, 2015.

[26] Shraboni Jana, *Interactive Multimedia Services in Mobile Wireless Networks*, 2015.

[25] Shaxun Chen, *Enhancing Wireless Security through Cross-Layer Approaches*, 2014.

[24] Chao-Chih Chen, *Practical Management as a Service (MaaS) Substrate for Data Center Network*, 2014.

[23] Xinlei Wang, *Provenance Based Information Trust in Wireless and Distributed Networks*, 2014.

[22]  Kefeng Tan, *Design and Implementation of Spectrum-Aware Wireless Multimedia Communications System*, 2013.

[21] Xiaolin Cheng, *Enhancing Quality of Video Services over Wireless Networks*, 2012.

[20] Debalina Ghosh, *Scheduling and Resource Allocation in OFDMA Wireless Networks*, 2012.

[19] An Chan, *Multimedia Communications over Wireless Networks*, 2012.

## 16. UNIVERSITY COMMITTEE SERVICES

**Department Committees (subset of recent ones):**

Department Executive Committee (2007-13),
Graduate Group Executive Committee (2010-13),
Chair of Faculty Search Committee (2013-14),
Chair of Graduate Group in Computer Science (2004-2007),
Graduate Admissions Committee (2001-2003)

**College Committees (subset of recent ones):**

Graduate Study Committee (2010-13),
Board Member of ETTC (2011-16),
Steering Committee Member of UCD/SNL/LLNL Open Campus Initiative (2011-15),
2020 Planning Committee Member (2012-13),
Faculty Personnel Committee (2013-14).

**Campus-wide Committees (subset of recent ones):**

Chancellor Leadership Council (2017- )
Budget Framework Advisory Committee (2019- )
Council of Deans (2016 - 17),
Chancellor's Cabinet (2013-2017),
Academic Council of Coordinating Deans (2013- )
Council of Deans and Vice-Chancellors (2013-present),
Chancellor's Council (2014-16),
Campus Community Council (2013-present),
STAIR – Entrepreneurial Proposal Review Panel (2014 - )
Data Science Institute (DSI) Advisory Committee (2014- )
Limited Submissions Review Committee (2014 - )
Joint Task Force for Research Units (2017)
Data Governance Committee (2017 - )

**System-wide Committees (subset of recent ones):**

Council of Vice Chancellors for Research (COVCR), 2018 –
Council of Cybersecurity, 2021 -
Search Committee for Vice President of Research and Innovation, 2019
Council of Graduate Deans, 2016-18

Program Committee Member:
        INFOCOM, 2003 -- 2015
        MOBIQUITOUS 2005, 2006
        MOBICOM, 2004, 2005, 2006, 2007, 2008
        MOBIHOC 2006, 2007
        Broadnets 2007, 2008
        SECON 2004, 2005, 2006, 2008, 2009, 2010
        ICNP 2008, 2009, 2010, 2011
        International Communications Conference (ICC) 2008
        WoWMoM 2006
        Mobile Wireless Communications Networks (MWCN), 2004
        Real Time Applications Symposium, 2004
        ICON, 2004
        IFIP Networking Conference, 2004, 2005
        International Conference on Parallel and Distributed Systems, 2004
        Wireless Communications and Networking Conference (WCNC), 2003
        International World Wide Web Conference (Practice and Experience Track), 2003
        Workshop on Trusted Internet Computing (with HiPC), 2002
        International Conference on Distributed Computing Systems, 2001.x300(Real Time Applications Tw[( WoWM