

Jennifer L. Wong-Ma

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Donald Bren School of ICS
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Work Experience

Vice-Chair for Undergraduate Studies
Associate Professor of Teaching
Department of Computer Science, University of California, Irvine

July 2021 - present
August 2018 – present

- **CSE Course Instructor:** Regularly teaches 6 CSE courses per academic year. Total course enrollment per course of 250-400 students. Managed team of 4-8 Teaching Assistants and Readers per quarter. Develop new programming assignments and exams each term.
- **Co-instructor for ICS Undergraduate Tutor program** Manage and instruct the 50-70 undergraduate tutors each quarter. Tutors mentor and assist students in lower division lab courses. Meet with first time tutors for 8 weeks during the quarter to discuss tutoring goals and challenges.
- **Remote Teaching Faculty Mentor:** Provided support and advice to faculty during remote teaching. Facilitated week-long working group for rapid transition. Held weekly teaching happy-hour to share experiences, lessons learned, and increase communication & moral
- **Undergraduate and Graduate Advisor:** Advised 7 undergraduate research students. Remote teaching advisor for ICS School during pandemic (remote) teaching. DTEI Graduate Fellow mentor for development of course support tool for the ICS community in Summer 2020. Mentored Team ShiftReduction in the Bren School Butterworth Product Development Competition in ICS (Software) in Spring 2019.

Research Assistant Professor
Assistant Professor
Department of Computer Science, Stony Brook University

January 2013 – August 2018
September 2006 – January 2013

- **CSE Course Instructor:** Regularly taught 5 CSE courses per academic year. Typical course enrollments of 100-220 students per course. Managed team of 10-15 undergraduate Teaching Assistants per semester to develop new programming assignments, hold office hours, and teach recitations. Developed with senior TAs scripted/automated grading environments and course management tools.
- **Computer Science Undergraduate Program Academic Advisor:** Worked closely with Undergraduate Program Director to manage and advise ~1200 CSE undergraduates. Raised student course concerns to Undergraduate curriculum committee. Stream-lined request/petition paperwork and procedures. Directly involved in Department course scheduling and managing course enrollments. Volunteered as academic advisor for CSE transfer students at student orientations.
- **Program Coordinator for Five-year Combined Degree BS/MS Program:** Managed the student application process, department committee application review, and program admissions. Advertised, advised and assisted students with application process, MS course enrollment, and program graduation. Expanded the program to 3x the size since 2009. Increased retention and enrollment rate of domestic students into the graduate program.
- **Mentor for Adjunct Teaching Faculty:** Direct advisement and main point of contact for new teaching faculty. Advised and assisted in course development and management. Provided feedback to teaching faculty based on direct observation and student feedback.

- **System Fundamentals Curriculum Redesign:** Coordinated with Senior faculty to redesign two-course core systems sequence: System Fundamentals I and System Fundamentals II. Primary instructor and course coordinator for both courses after redesign, facilitating continuous curriculum adjustments based on student course feedback.
- **Departmental Awards:** Award for Major contributions to Undergraduate Education in 2016. Undergraduate Teaching Award in Recognition of excellence in teaching and contributions to the BS/MS program in 2012.
- **Project Manager for campus-wise Stony Brook Smart Transit System:** Managed total development team of over 50 students to create a real-time GPS tracking system for the University Transit Department. Since 2010, the team has designed and maintained the back-end infrastructure, user web portal, management web portal, iOS & Android mobile applications, and equipment for a fleet of 50 vehicles. Currently migrating hardware to low-cost RaspberryPi platform, redesigning real-time prediction models for estimating time of arrival, and updating mobile apps.
- **Project Manager for campus Mobile Applications:** Developed with small teams of students to iOS and Android applications for various campus operations and organizations, including parking and CEAS advising.
- **Past Research Projects in the areas of:** Pervasive Computing and Mobility, Power Management Analysis of Virtualized Data Centers, Trustworthy Computing Through Hardware-based System Security, Node Desynchronization for Wireless Networks, Exploitation of Mobile Agents in Multi-tiered Sensor Networks, Data-driven Mobility Models, Modeling and Effects Wireless Ad-hoc Networks with Lossy Links

Research Assistant

June 2000 – June 2006

Department of Computer Science University of California, Los Angeles

- **Inter-Sensor Modeling:** Developed statistical models that take into account physical, chemical and biological laws to predict readings of sensors. Developed new symmetric monotonic regression technique for multiple sensor prediction. Analyzed and explored mutual correlations of sensor readings to enhance modeling accuracy. Applied and analyzed the application of inter-sensor statistical models for power saving optimization applications such as sensor node assignment.
- **Statistical Models of Lossy Links:** Developed density estimation based techniques for characterization of lossy links in wireless low power ad-hoc networks in indoor and outdoor environments. Analyzed the relationship between localized algorithms and network protocols and communication properties of links. Conducted a study on the statistical temporal properties of links in low power wireless communications. Analyzed the impact of statistical temporal properties on routing protocols.
- **Non-parametrical Statistical Techniques for Characterizing Interconnect Networks in Deep Sub-micron Designs:** Built statistical model for accurate prediction of likelihood of interconnect length prior to routing. Analyzed model prediction abilities using the buffer insertion problem. Developed an a priori wirelength estimation approach using rigorous statistical modeling and validation techniques. Analyzed the approach on two new applications for a priori total wirelength predictions: rapid exploration of the placement solution space and identification of placement invariant long nets.
- **Intellectual Property Protection for VLSI and CAD Tools:** Developed a system of Intellectual Property Protection techniques. The techniques provide sound mathematical proof of their effectiveness and ensure complete credibility and fairness. The techniques was applied to a variety of canonical design problems.

Teaching at UC Irvine

- ICS 51 Introduction to Computer Organization (Fall 2019, Winter 2020, Fall 2020, Winter 2021)
- ICS 53/53L Principles in System Design (Winter 2019, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021)
- COMPSCI 297P Capstone Design Project for Computer Science (Fall 2019)
- ICS 139W Critical Writing on Information Technology (Fall 2018, Winter 2019)
- CS 122A/EECS116 Introduction to Data Management (Fall 2018, Spring 2021, Summer 2021)

University, School, & Department Service at UC Irvine

- Judge for UCI Office of Campus Organizations & Volunteer Program Anteater Awards (2021)
- Member of ICS Working Group on Underrepresented Groups (2021)
- Member of OASIC Student Conduct Review Board (2021-present)
- Member of Faculty Q& A Panel at ICS Dean's Welcome (2019, 2020)
- UCI Commit The Change (CTC) Advisor (2020-present)
- ICS Remote Teaching Support Faculty (Summer 2020)
- Member of the UCI Senate Council on Education Policy (CEP) Committee (2019-present)
- Member of the UCI Senate Assessment and Policy Subcommittee CEP subcommittee (2019-present)
- Advisory Board Member for UCI Women in Technology (WiT) (2019-present)
- Co-Organizer for the Annual ICS Teaching Confab (2019 - present)
- Member of the ICS Lecturer Review Board (2018-present)
- Rotating Chair & Member of CSE Steering Committee (2018-present)
- Member of the CSE Undergraduate Admissions Augmented Review Board (2018-present)
- Women in Computer Science (WiCS) Co-advisor (2018-present)

UC Irvine Panels & Workshops

- Faculty Panel for SSI/SOAR Center Gateway Scholars Early Start Program (Summer 2021)
- Faculty Presenter for "This is How I Plan and Prepare for Remote Online Teaching" during 2021 DTEI Celebration of Teaching Showcase (Spring 2021)
- Co-host for Women in Tech Winter Webinar: Guest Speaker author Karen Catlin, "Allyship that makes an impact: How men can support women in IT" (Winter 2021)
- Participant in UCI DTEI Digital Learning Institute (DLI) Workshop (Winter 2021)
- Participant in UCI DTEI Remote Teaching Course Design Series (Summer 2020)
- Participant in UCI Summit on Teaching in the 21st Century (March 2020)
- Participant in UCI DTEI Active Learning Institute (Spring 2019)

Community Service

- Panelist for UCI ICS Student Council Q&A, a component of UCI ICS Week (May 2021)
- Judge for UCI VenusHacks hackaton hosted by WiCS Campus Club (April 2021)

- Judge for HackUCI hackaton hosted by HackUCI Campus Club (Feb 2021)
- University High School Girls Who Code – Guest Speaker (Feb 2021)
- Grace Hopper Scholarship Review Committee (March 2020)

Advising at UCI

- *Undergraduate Research Advisees:* Saul Guardarrama (Spring 2021), Akshaya Manchala (Winter 2021), Conan Truong (Winter 2021), Zachary Pinto (Fall 2020), MD Alaya (Spring 2020), Hoa Ly (Spring 2019, Spring 2020), Joshua Mitchener (Spring 2020), Brian Caulfield (Spring 2019)

Teaching at Stony Brook University

- CSE 220 System Fundamentals I (Fall 2015, 2016, 2017; Spring 2015, 2016, 2017, 2018)
- CSE 220 System-level Programming (Fall 2007, 2010 2012, 2013, 2014; Spring 2010, 2014)
- CSE/ISE 300 Technical Writing (Fall 2013; Spring 2014)
- CSE 306 Operating Systems (Spring 2011)
- CSE/ISE 312 Legal Issues in Information Systems (Fall 2013)
- CSE 320 System Fundamentals II (Fall 2015, 2016, 2017; Spring 2016, 2017)
- CSE 320 Computer Architecture (Spring 2008, Fall 2011, 2014, 2015 - as CSE390; Spring 2012, 2014, 2015)
- CSE 392 Special Topics: Network Programming (Spring 2018)
- CSE 487 Research in Computer Science (Fall 2008, 2011; Spring 2008, 2009, 2012, 2014)
- CSE 523 Intro to Software Engineering Project Plan (2007-current)
- CSE 524 Lab in Computer Science (2008-current)
- CSE 533 Network Programming (Fall 2017)
- CSE 587 Proficiency Requirement (Spring 2008)
- CSE 591 Special Topics: Design of Embedded Systems (Spring 2009, 2010, 2011)
- CSE 592 Special Topics in CS: Design and Analysis of Embedded Systems (Spring 2007, Fall 2009)
- CSE 593 Independent Study in CS (Fall 2008, 2010, 2011; Spring 2008, 2009, 2012)
- CSE 594 Special Topics: Embedded Systems (Fall 2008, Spring 2012)
- CSE 658 Advanced Topics in Computer Science: Mobile and Wireless Networking Seminar (Spring 2009)
- CSE 651 Advanced Topics in Computer Science: Seminar on Mobile Computing for Informal Economies (Fall 2008, Spring 2009 - Joint with Anita Wasilewska)
- CSE 690 Special Topics in CS: Embedded Systems (Fall 2006)
- ITS 102 Topics in Information and Technology Studies (Spring 2012)

Stony Brook University Panels & Events

- CEAS Faculty Roundtable Speaker (Fall 2015 - Spring 2018)
- Participant, "Excellence and Diversity in Engineering Education: Academia, Industry and Government Workshop" - College of Engineering and Applied Sciences, Stony Brook University (August 3, 2017)
- Panel member, "Faculty Panel Discussion: Preparation and Opportunities to Study at the

University" - College of Engineering and Applied Science, Stony Brook University (April 27, 2017)

- Panel member, "Empowering Women in Science Panel" - School of Leadership and Service, Stony Brook University (March 30, 2017)
- Participant, "Summer Institute on Undergraduate STEM Education" - Center for Global Studies and Human Development, Stony Brook University (July 7-10, 2014)

Stony Brook University Service Awards

- CSE Department Award for Major Contributions to Undergraduate Education (2016)
- CSE Department Undergraduate Teaching Award (2012)

University & Department Service at Stony Brook University

- Computer Science Department Honor Program Committee Member (2017 - 2018)
- Member of CSE Department Instructor Hiring Committee (2017 - 2018)
- Member of WiSE Advisory Board (2016 - present)
- Groups: Google Ignite Computer Science (EDUCodes) Faculty Advisor (2016 - 2017)
- CSE Academic Program Advisor for CSE Department (2014 - 2018)
- CSE Academic Program Advisor at CEAS Transfer Student Orientations (2014 - 2018)
- CEAS 2016-17 Scholarship Committee (2014 - 2018)
- Undergraduate Curriculum Committee Member (2010 - 2018)
- Program Manager for campus-funded SBUSmartTransit (2010 - 2018)
- Program Coordinator for Five-year Combined Degree BS/MS Program (2009 - 2018)
- Groups: Women in Computer Science (WiCS) Advisor (2008 - 2015)
- Member of CSE Graduate Admission Committee (2006 - 2012)
- CSE Computer Organization/Architecture Proficiency Faculty (2007 - 2009)
- CSE Ph.D. Qualifying Exam Revision Committee (May - July 2007, 2008-2009)
- CSE Ph.D. Qualifying Exams: Computer Architecture/Computer Organization (Sept 2006 - May 2007)

Advising at Stony Brook University

- *M.S. Advisee:* Neal Beeken (2019)
- *Honors Advisees:* Yibin Lin (2011), Xincheng Zhang (2011), Kunal Aggarwal (2011), Howard Lin (2011), Matthew Cordaro (2012), Greg Cordts (2012), Aaron Rosenthal (2015), Michael Lavina (2015), Jamie Lapine (2015), Phillippe Kimura-Thollander (2016), Reid Horton (2017), Jake Tulsa (2018)
- *Undergraduate Research Advisees:* Ethan Gui (Spring 2010), Edward Kimbel (Honors Student), Wonhong Lee (Spring 2010), Jaiyu Zhang (Fall 2011/Spring 2012), Yeseul Lee (2015), Steven Herring (2105), YuanYuan Peng (2015)
- *Ph.D. Committee:* Wei Li (2003), Dengpan Zhou (2012), Anand Kashyap (2008)
- *M.S. Graduates:* Justin Lapre (Fall 2008), Seung Joon Park (Spring 2007), Chang Oh Son (Summer 2007), Divya Gopalathna (Fall 2009), Aneeta Bhattacharyya (Spring 2010), Kangjin Kim (Spring 2010), Jason Wu (Spring 2010), Abhay Ravi Chandran (2011), Ravneet Singh Dhaliwal (Fall 2011), Sanjeev Jain (Fall 2011), Sudheer Babu Jetty (Fall 2011), Vijet Mahabaleshwar (Fall 2011), Seth Morash (Fall 2011), Koundinya Muppalla (Fall 2011),

Cajeton Clint Nada (Spring 2011), Swetha Nagendran (Spring 2011), Prasad Narasimhan (Spring 2011), Anusha Pachunuri (Spring 2011), Chong Sun (Spring 2011), Purbesh Sahoo (Fall 2012), Saichand Neelapala (Fall 2012), Sandeep Reddy Sebe (Fall 2012), Sanket Padawe (Fall 2012), Shobha Agrawal (Fall 2012), Siva Popuri (Fall 2012), Snehal Saraf (Fall 2012), Vishwak Neravetla (Fall 2012), Stephen Elmendorf (Fall 2012), Benixon Arul Dhas (Spring 2013), Rong Zhang (Fall 2013), Kunal Aggarwal (Spring 2015), Soumadip Mukherjee (Spring 2016), Paul Campbell (Spring 2016), Yinquan Hao (Spring 2017), Justin Maldonado (Fall 2017), Richard Huang (Spring 2019)

Education

University of California, Los Angeles, CA

Ph.D. in Computer Science, July 2006.

Ph.D. Thesis: *Design of Embedded Systems using Data-Driven Statistical Techniques*.

University of California, Los Angeles, CA

M.S. in Computer Science, December 2002.

Master's Thesis: *Non-Parametric Statistical Techniques for Forensic Engineering*.

University of California, Los Angeles, CA

B.S in Computer Science and Engineering, June 2000.

Journal Publications

[J9] **J. L. Wong**, A. Davoodi, V. Khandelwal, A. Srivastava, and M. Potkonjak, "A statistical methodology for wire-length prediction," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 25, no. 7, pp. 1327–1336, July 2006.

[J8] **J. L. Wong**, G. Qu, and M. Potkonjak, "Power minimization in QoS sensitive systems," *IEEE Trans. Very Large Scale Integrated Systems*, vol. 12, no. 6, pp. 553–561, 2004.

[J7] **J. L. Wong**, R. Majumdar, and M. Potkonjak, "Fair watermarking using combinatorial isolation lemmas," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 23, no. 11, pp. 1566–1574, 2004.

[J6] **J. L. Wong**, D. Kirovski, and M. Potkonjak, "Computational forensic techniques for intellectual property protection," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 23, no. 6, pp. 987–994, 2004.

[J5] A. Caldwell, H.-J. Choi, A. Kahng, S. Mantik, M. Potkonjak, G. Qu, and **J. L. Wong**, "Effective iterative techniques for fingerprinting design IP," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 23, no. 2, pp. 208–215, 2004.

[J4] **J. L. Wong**, G. Qu, and M. Potkonjak, "Optimization-intensive watermarking techniques for decision problems," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 23, no. 1, pp. 119–127, 2004.

[J3] **J. L. Wong**, M. Potkonjak, and S. Dey, "Optimizing designs using the addition of

deflection operations," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 23, no. 1, pp. 50–59, 2004.

[J2] **J. L. Wong**, F. Koushanfar, S. Megerian, and M. Potkonjak, "Probabilistic constructive optimization techniques," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 23, no. 6, pp. 859–868, 2004.

[J1] G. Wolfe, **J. L. Wong**, and M. Potkonjak, "Watermarking graph partitioning solutions," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, vol. 21, no. 10, pp. 1196–1204, 2002.

Conference Publications

[C46] J. Mitchener, N. Beeken, and **J. L. Wong**, "Dashmips: MIPS interpreter and VSCode Debugger," in *52 ACM Technical Symposium on Computer Science Education, SIGCSE*, 2021.

[C45] M. Ehsan, Y. Chen, H. Kang, R. Sion, and **J. L. Wong**, "Lips: A cost-efficient data and task co-scheduler for mapreduce," in *20th Annual International Conference on High Performance Computing, HiPC*, 2013.

[C44] H. Kang and **J. L. Wong**, "vcsimx86: a cache simulation framework for x86 virtualization hosts," in *Third Workshop on Runtime Environments/Systems, Layering, and Virtualized Environments, RESoLVE*, 2013.

[C43] ———, "To hardware prefetch or not to prefetch: A virtualized environment study & core binding approach," in *18th International Conference on Architectural Support for Programming Languages and Operating Systems, ASPLOS*, 2012, pp. 357–368.

[C42] H. Kang, X. Zhu, and **J. L. Wong**, "Dapa: Diagnosing application performance anomalies for virtualized infrastructures," in *2nd USENIX Workshop on Hot Topics in Management of Internet, Cloud, and Enterprise Networks and Services (Hot-ICE)*, 2012, pp. 8–8.

[C41] H. Kang, Y. Chen, **J. L. Wong**, R. Sion, and J. Wu, "Enhancement of xen's scheduler for mapreduce workloads," in *International Symposium on High Performance Distributed Computing*, June 2011, pp. 251–262.

[C40] A. Bhattacharyya and **J. L. Wong**, "A resilient actuation attack on wireless sensor network," in *International Conference on Sensor Networks and Applications*, November 2010, pp. 251–256.

[C39] M. Potkonjak, S. Meguerdichian, and **J. L. Wong**, "Trusted sensors and remote sensing," in *IEEE Conference on Sensors*, November 2010, pp. 1104 – 1107.

[C38] T. Giridher, A. Wasilewska, **J. L. Wong**, and K. S. Rekhi, "Global mobile applications for monitoring health," in *International Multiconference on Computer Science and Information Technology*, October 2010, pp. 855–859.

[C37] T. Giridher, A. Bulchandani, R. Kim, P. Naik, A. Wasilewska, and J. L. Wong, "Social

mobile applications," in *IEEE The Sixth Annual Conference on Long Island Systems, Applications and Technology*, May 2010, pp. 1–6.

[C36] A. Wasilewska and **J. L. Wong**, "Developing template applications for social advancement," in *1st International Symposium on Intelligent Mobile Technologies for Social Change at International Multiconference on Computer Science and Information Technology*, October 2009, pp. 391–398.

[C35] C. Scharff, A. Wasilewska, **J. L. Wong**, M. Bousso, and I. Ndiaye, "A model for teaching mobile application development for social changes: Implementation and lessons learned in senegal," in *1st International Symposium on Intelligent Mobile Technologies for Social Change at International Multiconference on Computer Science and Information Technology*, October 2009, pp. 383–389.

[C34] T. Giridher, R. Kim, D. Rai, A. Hanover, J. Yu, F. Zarinni, C. Scharff, A. Wasilewska, and **J. L. Wong**, "Mobile applications for informal economies," in *1st International Symposium on Intelligent Mobile Technologies for Social Change at International Multiconference on Computer Science and Information Technology*, October 2009, pp. 345–352.

[C33] S. P. Tinta, Y. Zhou, and **J. L. Wong**, "Robot-assisted energy-efficient data collection from high-fidelity sensor networks," in *International Conference on Technologies for Practical Robot Applications*, November 2009, pp. 101–106.

[C32] S. P. Tinta, A. E. Mohr, and **J. L. Wong**, "Characterizing end-to-end packet reordering with udp traffic," in *IEEE Symposium on Computers and Communications*, July 2009, pp. 321–324.

[C31] H. Kang and **J. L. Wong**, "A localized multi-hop desynchronization algorithm for wireless sensor networks," in *IEEE Infocom*, April 2009, pp. 2906–2910.

[C30] A. Singh, C. Ramnkrishnan, I. Ramnkrishnan, D. Warren, and **J. L. Wong**, "A methodology for in-network evaluation of integrated logical-statistical models," in *IEEE Sensys*, 2008, pp. 197–210.

[C29] **J. L. Wong**, A. Davoodi, V. Khandelwal, A. Srivastava, and M. Potkonjak, "Statistical timing analysis using kernel smoothing," in *International Conference on Computer Design*, 2007, pp. 97–102.

[C28] M. Potkonjak and **J. L. Wong**, "Introduction to digital design: A paradigm-based approach," in *IEEE International Conference on Microelectronic Systems Education*, 2007, pp. 167–168.

[C27] **J. L. Wong**, S. Megerian, and M. Potkonjak, "Symmetric monotonic regression: Techniques and applications for sensor networks," in *IEEE Sensors Applications Symposium*, 2007, pp. 1–6.

[C26] ———, "Minimizing global interconnect in DSP systems using bypassing," in *IEEE International Conference on Aoustics, Speech, and Signal Processing*, vol. 2, 2007, pp. 77–80.

[C25] ———, "Staggered sampling for energy efficient data collection," in *IEEE Conference on Sensors*, 2006, pp. 777–780.

[C24] **J. L. Wong**, F. Koushanfar, and M. Potkonjak, "Flexible ASIC: Shared masking for multiple media processors," in *DAC '05: Proceedings of the 42th ACM/IEEE Conference on Design Automation*, 2005, pp. 909–914.

[C23] A. Cerpa, **J. L. Wong**, M. Potkonjak, and D. Estrin, "Temporal properties of low-power wireless links: Modeling and implications on multi-hop routing," in *ACM International Symposium on Mobile Ad Hoc Networking and Computing*, 2005, pp. 414–425.

[C22] A. Cerpa, **J. L. Wong**, L. Kuang, M. Potkonjak, and D. Estrin, "Statistical model of lossy links in wireless sensor networks," in *IEEE/ACM International Conference on Information Processing in Sensor Networks*, 2005, pp. 81–88.

[C21] **J. L. Wong**, W. Liao, F. Li, L. He, and M. Potkonjak, "Scheduling of soft real-time systems for context-aware applications," in *International Conference on Design, Automation and Test in Europe*, 2005, pp. 318–323.

[C20] **J. L. Wong**, R. Jafari, and M. Potkonjak, "Gateway placement for latency and energy efficient data aggregation," in *LCN '04: Proceedings of the 29th Annual IEEE International Conference on Local Computer Networks (LCN'04)*. 1em plus 0.5em minus 0.4em IEEE Computer Society, 2004, pp. 490–497.

[C19] **J. L. Wong**, S. Megerian, and M. Potkonjak, "Design techniques for sensor appliances: foundations and light compass case study," in *DAC '03: Proceedings of the 40th Conference on Design Automation*. 1em plus 0.5em minus 0.4em ACM Press, 2003, pp. 66–71.

[C18] F. Koushanfar, **J. L. Wong**, J. Feng, and M. Potkonjak, "ILP-based engineering change," in *DAC '02: Proceedings of the 39th Conference on Design Automation*. 1em plus 0.5em minus 0.4em ACM Press, 2002, pp. 910–915.

[C17] **J. L. Wong**, S. Megerian, and M. Potkonjak, "Forward-looking objective functions: concept and applications in high level synthesis," in *DAC '02: Proceedings of the 39th Conference on Design Automation*. 1em plus 0.5em minus 0.4em ACM Press, 2002, pp. 904–909.

[C16] **J. L. Wong**, D. Kirovski, and M. Potkonjak, "Computational forensic techniques for intellectual property protection," in *IHW '01: Proceedings of the 4th International Workshop on Information Hiding*. 1em plus 0.5em minus 0.4em Springer-Verlag, 2001, pp. 66–80.

[C15] **J. L. Wong**, F. Koushanfar, S. Meguerdichian, and M. Potkonjak, "A probabilistic constructive approach to optimization problems," in *ICCAD '01: Proceedings of the 2001 IEEE/ACM International Conference on Computer-Aided design*. IEEE Press, 2001, pp. 453–456.

[C14] G. Wolfe, **J. L. Wong**, and M. Potkonjak, "Watermarking graph partitioning solutions," in *DAC '01: Proceedings of the 38th Conference on Design Automation*. ACM Press, 2001, pp. 486–489.

[C13] R. Majumdar and **J. L. Wong**, "Watermarking of SAT using combinatorial isolation lemmas," in *DAC '01: Proceedings of the 38th Conference on Design Automation*. ACM Press, 2001, pp.

480–485.

[C12] G. Qu, **J. L. Wong**, and M. Potkonjak, "Fair watermarking techniques," in *ASP-DAC '00: Proceedings of the 2000 Conference on Asia South Pacific Design Automation*. ACM Press, 2000, pp. 55–60.

[C11] A. B. Kahng, D. Kirovski, S. Mantik, M. Potkonjak, and **J. L. Wong**, "Copy detection for intellectual property protection of VLSI designs," in *ICCAD '99: Proceedings of the 1999 IEEE/ACM International Conference on Computer-aided design*. IEEE Press, 1999, pp. 600–605.

[C10] A. E. Caldwell, H.-J. Choi, A. B. Kahng, S. Mantik, M. Potkonjak, G. Qu, and **J. L. Wong**, "Effective iterative techniques for fingerprinting design IP," in *DAC '99: Proceedings of the 36th ACM/IEEE Conference on Design Automation*. ACM Press, 1999, pp. 843–848.

[C9] G. Qu, **J. L. Wong**, and M. Potkonjak, "Optimization-intensive watermarking techniques for decision problems," in *DAC '99: Proceedings of the 36th ACM/IEEE Conference on Design Automation*. ACM Press, 1999, pp. 33–36.

[C8] **J. L. Wong**, A. Davoodi, V. Khandelwal, A. Srivastava, and M. Potkonjak, "Wire-length prediction using statistical techniques," in *IEEE/ACM International Conference on Computer Aided Design*, 2004, pp. 702–705.

[C7] D. Kirovski, D. Liu, **J. L. Wong**, and M. Potkonjak, "Forensic engineering techniques for VLSI CAD tools," in *DAC '00: Proceedings of the 37th Conference on Design Automation*, 2000, pp. 580–586.

[C6] **J. L. Wong**, G. Qu, and M. Potkonjak, "An on-line approach for power minimization in QoS sensitive systems," in *ASP-DAC '03: Proceedings of the 2003 Conference on Asia South Pacific Design Automation*, 2003, pp. 59–64.

[C5] **J. L. Wong** and M. Potkonjak, "Search in sensor networks: challenges, techniques, and applications," in *IEEE International Conference on Acoustics, Speech, and Signal Processing*, vol. IV, 2002, pp. 3752–3755.

[C4] **J. L. Wong**, J.-Q. Yao, and M. Potkonjak, "Watermarking multiple constant multiplications solutions," in *Asilomar Conference on Signals, Systems, and Computers*, 2004, pp. 67–71.

[C3] **J. L. Wong** and M. Potkonjak, "Relative generic computational forensic techniques," in *IHW '04: Proceedings of the 6th International Information Hiding Workshop*, 2004, pp. 148–163.

[C2] **J. L. Wong**, G. Veltri, and M. Potkonjak, "Energy-efficient event tracking in multi-hop wireless networks," in *Integrated Management of Power Aware Communications, Computing and Networking (IMPACCT)*, 2002, pp. 69–85.

[C1] **J. L. Wong**, G. Qu, and M. Potkonjak, "Power minimization under QoS constraints," in *IEEE International Packet-video Workshop*, 2002, pp. 22–1 – 22–10.

Editorials

[E2] D. Uhler, K. Mehta, and **J. L. Wong**, Eds., *Mobile Computing, Applications, and Services - 4th International Conference*, ser. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering 110. Springer, 2013.

[E1] J. Zhang and **J. L. Wong**, Eds., *Mobile Networks and Applications*, ser. Editorial for MobiCASE 2011 Special Issue. Springer, 2011.

Book Chapters

[BC2] S. Slijepcevic, **J. L. Wong**, and M. Potkonjak, "Security and privacy protection in wireless sensor networks," *Handbook of Sensor Networks: Compact Wireless and Wired Sensing Systems*, pp. 31–1 – 31–15, 2004.

[BC1] **J. L. Wong**, J. Feng, D. Kirovski, and M. Potkonjak, "Security in sensor networks: watermarking techniques," *Wireless Sensor Networks*, pp. 305–323, 2004.

Manuscripts

[M12] T. Massey, **J. L. Wong**, and M. Potkonjak, "Feature size characterization of integrated circuits in the presence of manufacturing variability," September 2008, design Automation and Test Conference (DATE).

[M11] S. P. Tinta, A. E. Mohr, and **J. L. Wong**, "Packet reordering: Heterogeneity, multiple time-scales, diurnal cycles, size dependencies, and more," in *Internet Measurement Conference*, May 2008.

[M10] S. Tinta and **J. L. Wong**, "Maximizing connectivity with efficient mobile clusterheads," in *IEEE Sensors*, April 2008.

[M9] J. Lapre, E. Kim, and **J. L. Wong**, "Efficient sensor scheduling in self-sufficient sensor networks," in *IEEE Sensors*, April 2008.

[M8] S. J. Park, **J. L. Wong**, and J. Gao, "Real-world mobility trace collection and modeling for wireless simulation environments," in *ACM International Workshop on Wireless Network Testbeds, Experimental Evaluation and Characterization*, May 2007.

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[M5] ———, "Kernel smoothing approach to statistical timing analysis," in *Design Automation Conference*, November 2006.

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[M2] ———, "A priori wirelength estimation: Statistical models, bounds, and applications," *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, July 2006.

[M1] **J. L. Wong**, "Synthesis and architectural techniques for integrated devices and circuits with optical intrachip interconnect," November 2006, DARPA Young Faculty RA06-39.

Professional Activities

- Conference Reviewer for The 53rd ACM Technical Symposium on Computer Science Education, 2022.
- Conference Reviewer for The 52nd ACM Technical Symposium on Computer Science Education, Virtual, March 12-20, 2021.
- Session Chair for The 52nd ACM Technical Symposium on Computer Science Education, Virtual, March 12-20, 2021.
- Reviewer for NCWIT EngageCSEdu (2018-current)
- Member of IEEE and ACM.
- Program Chair for The 4rd International Conference on Mobile Computing, Applications, and Services, Los Angeles, October 10-12, 2012.
- Publicity Chair for The 3rd International Conference on Mobile Computing, Applications, and Services, Los Angeles, October 24-27, 2011.
- Publication Chair for The 16th Annual International Conference on Mobile Computing and Networking, Chicago, September 20-24, 2010.
- Conference Organizer/Program Chair for International Symposium on Technologies for Social Advancement (T4SA'10) held in conjunction with International Multiconference on Computer Science and Information Technology Wisla, Poland, October 18-20, 2010.
- Conference Organizer/Program Chair for 1st International Symposium on Intelligent Mobile Technologies for Social Change (IMT4SC'09) held in conjunction with International Multiconference on Computer Science and Information Technology Mragowo, Poland, October 12-14, 2009.
- Program Committee for International Conference on Computer Communications and Networks (2007, 2008, 2009, 2010), Advances in Artificial Intelligence and Applications (AAIA 2009).
- Reviewer for IEEE Transactions on Dependable and Secure Computing, IEEE Transactions on Very Large Scale Integration Systems, IEEE/ACM Transactions on Networking, IEEE Transactions on Sensor Networks, Elsevier Ad hoc Networks, Elsevier Ad-Hoc Networks Journal, IEEE Multimedia, Computer Networks Journal, Elsevier Journal on Computer Networks