USC VITERBI SCHOOL OF ENGINEERING

Konstantinos Psounis
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Curriculum Vitae

Education

STANFORD UNIVERSITY — Stanford, CA
Ph.D. degree in Electrical Engineering — Jan. 1999 - Dec. 2002
Thesis title: "Probabilistic Methods for Web Caching and Performance Prediction of IP Networks and Web Farms", supervised by Prof. Balaji Prabhakar.

STANFORD UNIVERSITY — Stanford, CA
M.S. degree in Electrical Engineering — Sep. 1997 - Jan. 1999
GPA: 4.0/4.0.

NATIONAL TECHNICAL UNIVERSITY OF ATHENS — Athens, Greece
Diploma in Electrical and Computer Engineering — Sep. 1992 - June 1997
GPA: 9.74/10.0. (Graduated ranking 1st in the class of '97.)

Work in Academia

UNIVERSITY OF SOUTHERN CALIFORNIA — Los Angeles, CA
Electrical and Computer Engineering (ECE) and (by courtesy) Computer Science dept.
Professor — Nov. 2017 - now
Associate Chair of ECE department — July 2021 - June 2024
Associate Chair of ECE department — Jan. 2019 - Aug 2019
Associate Professor — May. 2009 - Nov. 2017
Assistant Professor — Sep. 2003 - Apr. 2009
Research interests: Modeling, performance analysis, algorithm design, and system design and implementation for efficient, AI-enabled and privacy-preserving networked, distributed systems, including the Internet and the web, data centers and cloud systems, wireless systems (e.g. WiFi, cellular, IoT, spectrum sharing, delay tolerant, mobile ad hoc), augmented and virtual reality systems, autonomous robotic/vehicle/drone systems, and peer to peer systems.

STANFORD UNIVERSITY — Stanford, CA
Visiting Associate Professor — Aug. 2009 - Dec. 2009

STANFORD UNIVERSITY — Stanford, CA
Postdoctoral Research Fellow — Jan. 2003 - Aug. 2003

Technical Work outside academia

ADANT Technologies
Technical Consultant — Jan. 2017 - May 2018
WiFi 802.11ax and smart antennas.

QUANTENNA COMMUNICATIONS
Technical Consultant — Jan. 2015 - 2016
Advanced MAC and PHY layer techniques applied to next generation wireless networks.

HONEYWELL
Technical Consultant — Sep. 2013 - Jun. 2014
Sensor-network based fire alarm systems.

SpaceMUX, Inc.
Co-founder and CEO May 2013 - Dec. 2014
Increasing wireless bandwidth and speed tenfold.

CISCO SYSTEMS San Jose, CA
Technical Consultant Sep. 2009 - Dec. 2009
Vehicular multi-technology wireless connectivity.

FINEGROUND NETWORKS Inc. Cambell, CA
Technology Architect Sep. 2000 - June 2001
Accelerating web downloads using delta encoding.

Expert Witness
Ongoing Work

Luna et al. v. Google
Case No. 24CV434093 (N.D. Cal.) Apr. 2025 - now
Representing defendant Google.

Markels v. AARP
Case No. 4:22-cv-05499-YGR (N.D. Cal.) Dec 2024 - now
Representing defendant AARP.
Reports:
Initial expert report Apr. 15, 2025

Google RTB Consumer Privacy Litigation
Case No. 4:21-cv-02155-YGR-VKD (N.D. Cal.) July 2023 - now
Representing defendant Google.
Reports:
Initial expert report Sep. 29, 2023
Supplemental expert report Jan. 31, 2025
Court Appearances:
Deposition re initial expert report Oct. 16, 2023
Deposition re initial supplemental report Feb. 18, 2025

JP Morgan Chase v. Charlie Javice
Representing defendant for issues related to Google Analytics and Data Synthesis and Augmentation
Expert Disclosure July. 15, 2024

Expert Witness
Completed Recent Work

Brown v. Google LLC
Case No. 4:20-cv-03664-YGR-SVK (N.D. Cal.) Apr. 2022 - Jan. 2024
Representing defendant Google, judge only certified an injunctive class, case settled.
Reports:
First rebuttal expert report June 7, 2022
Second rebuttal expert report Aug. 30, 2023
Declarations:
First declaration Nov. 30, 2022

Second declaration — Feb. 10, 2023
Court Appearances:
Deposition re first rebuttal expert report — Aug. 19, 2022
Deposition re second rebuttal expert report — Oct. 9, 2023

Atlas Global Technologies vs ASUSTeK computer inc.
Case No. 6:21-cv-00820-ADA (E.D. Texas) — Sep. 2022 - Dec. 2023
Representing plaintiff Atlas, case settled.
Reports:
Rebuttal expert report re validity of multiple patents — July 14, 2023
Court Appearances:
Deposition re validity of multiple patents — Aug. 1, 2023

Atlas Global Technologies v. ONEPLUS Technology (Shenzhen) Co., LTD
Case No. 6:21-CV-01217-ADA (W. D. Texas) — Mar. 2023 - Dec. 2023
Representing plaintiff Atlas, case settled.
Declarations:
Declaration re claim construction for multiple patents — Nov. 18, 2022

Zyxel Comm and Networks Corporation v. Atlas Global Technologies
Case No IPR2023-00877 — Mar. 2023 - Oct. 2023
Representing patent owner Atlas. PTAB denied institution of IPR. Case settled.
Declarations:
Declaration re validity of a patent — Aug. 11, 2023

Zyxel Comm and Networks Corporation v. Atlas Global Technologies
Case No IPR2023-00863 — Mar. 2023 - Oct. 2023
Representing patent owner Atlas. PTAB denied institution of IPR. Case settled.
Declarations:
Declaration re validity of a patent — Aug. 11, 2023

Atlas Global Technologies v. Sercom Corp.
Case No. 6:21-cv-00818-ADA (E.D. Texas) — Oct. 2022 - Oct. 2023
Representing plaintiff Atlas, case settled.
Reports:
Rebuttal expert report re validity of multiple patents — July 14, 2023
Court Appearances:
Deposition re validity of multiple patents — Aug. 1, 2023

Sercomm Corp. v. Atlas Global Technologies
Case No. IPR2022-01519 — Sep. 2022 - Apr. 2023
Representing patent owner Atlas, PTAB denied institution of IPR.
Declarations:
Declaration re validity of a patent — Jan. 19, 2023

Sercomm Corp. v. Atlas Global Technologies
Case No. IPR2022-01520 — Sep. 2022 - Apr. 2023
Representing patent owner Atlas, PTAB denied institution of IPR.
Declarations:

Declaration re validity of a patent — Jan. 19, 2023

Atlas Global Technologies vs TP-Link Tech., Co, et al.
Case No. 2:21-cv-00430-JRG (E.D. Texas) — Sep. 2022 - Sep. 2023
Representing plaintiff Atlas. Atlas was granted the full requested damages amount.
Reports:
Rebuttal expert report re validity of multiple patents — May 23, 2023
Court Appearances:
Deposition on opinions rendered re validity of multiple patents — June 5, 2023

Broadcom v. Netflix
Case No. 3:20-cv-04677-JD (N.D. Cal.) — Jan. 2021 - Apr. 2022
Representing defendant Netflix. Judge ordered the case to stay.

CA and AVAGO v. Netflix
Case No. 2:21-CV-00080-JRG-RSP (E.D. Texas) — Jan. 2021 - Apr. 2022
Representing defendant Netflix. Judge ordered the case to stay.
Reports:
Opening expert report re invalidity of patents — Dec. 20, 2021
Supplemental opening expert report re invalidity of patents — Dec. 27, 2021
Rebuttal expert report re infringement of patents — Jan. 11, 2022
Declarations:
Declaration re claim construction for patents — Aug. 30, 2021
Court Appearances:
Deposition re invalidity and non-infringement of patents — Jan. 19, 2022

PhD Student Supervision

- Dimitris Andreadis (Aug. 2024 - now)
- Ryan Swift (Aug. 2024 - now)
- Jike Zhong (Aug. 2024 - now)
- Stavros Damianakis (Aug. 2024 - now)
- Rohan Sequeira (Aug. 2023 - now)
- Te Yi Kan (Jan. 2023 - now)
- Tina Esmaeilzadeh (Aug. 2022 - now)
- Namo Asavisanu (Aug. 2021 - now)
- Jiang Zhang (Aug. 2019 - May 2024, currently at *Facebook*)
- Lillian Clark (co-advised with Prof. Bhaskar Krisnamachari, Sep. 2018 - March 2023, currently at *SpaceX*)
- Hang Qiu (primary advisor Prof. Ramesh Govindan, Jan. 2015 - June 2021, currently *Assistant Professor at the University of California, Riverside*)
- Po-Han Huang (Sep. 2015 - Jan. 2020, currently at *Facebook*)
- Kaidong Wang (Sep. 2014 - Dec. 2019, currently at *Qualcomm*)
- Yonglong Zhang (Sep. 2013 - Dec. 2018, currently at *Facebook*)
- Matthew Clark (Sep. 2013 - Dec. 2017, currently at *Aerospace Corporation*)
- Weng Chon Ao (Sep. 2012 - Dec. 2017, currently at *Qualcomm*)
- Antonios Michaloliakos (Aug. 2010 - Sep. 2016, currently at *Enfabrica, California*)

- Ranjan Pal (co-advised with Prof. Leana Golubchik, Jan. 2009 - Aug. 2014, currently *Research Scientist at MIT*)
- Vlad Horia Balan (Sep. 2007 - Aug. 2013, currently at *Google*)
- Wei-Cherng Liao (Sep. 2004 - Dec. 2008, currently at *MediaTek, Taiwan*)
- Apoorva Jindal (Sep. 2003 - Dec. 2008, currently at *Uber*)
- Fragkiskos Papadopoulos (Sep. 2003 - Dec. 2007, currently *Associate Professor at Cyprus University of Technology, Cyprus*)
- Thrasyvoulos Spyropoulos (Sep. 2003 - Jun. 2006, currently *Professor at Technical University of Crete, Greece*)

Proposals Funded

Amazon Grant — Sep. 2023
Proposal title: Private labelling and learning for voice assistants with cameras.

Amazon Grant — Sep. 2022
Proposal title: Federated learning with secure aggregation: Accessing and improving its privacy.

CA-Santa Monica Mountains Conservancy Grant — Dec. 2021
Proposal title: Wildfire Detection and Fighting Using a Network of Collaborative Drones.

NSF SaTC Grant — Oct. 2020 - Sep. 2025
National Science foundation (NSF) award under the Secure and Trustworthy Computing (SaTC) call.
Proposal title: SaTC: Frontiers: Collaborative: Protecting Personal Data Flow on the Internet.

NSF CNS Grant — Oct. 2020 - Sep. 2023
National Science foundation (NSF) award under the Computer and Networked Systems (CNS) call.
Proposal title: CNS Core: Medium: Network-Enabled Cooperative Perception for Future Autonomous Vehicles.

NSF NeTS Grant — Sep. 2019 - Aug. 2022
National Science foundation (NSF) award under the Networking Technology and Systems (NeTS) call.
Proposal Title: CNS Core: Medium: Collaborative Research: Privacy-Preserving Mobile Crowdsourcing.

Cisco Systems Grant — April 2019
Proposal Title: Virtual and augmented reality over next generation WiFi.

Cisco Systems Grant — Dec 2016
Proposal Title: Data-driven formal optimization of data centers.

NSF NeTS Grant — Sep. 2016 - Aug. 2020
National Science foundation (NSF) award under the Networking Technology and Systems (NeTS) call.
Proposal Title: Spectrum Sharing Systems for Wireless Networks: Performance and Privacy Challenges.

Adant Technologies Grant — June 2016
Proposal Title: Using reconfigurable antenna systems with WiFi communication devices.

Huawei Grant — May 2016
Proposal Title: Addressing wireless bandwidth demand via asynchronously coordinated multi-cell deployments.

Adant Technologies Grant — Dec. 2015
Proposal Title: Asynchronous coordination of WiFi transmitters equipped with smart antennas for enhanced spectral efficiency.

NSF EARS Grant — Sep. 2014 - Aug. 2019
National Science foundation (NSF) award under the Enhancing Access to the Radio Spectrum (EARS) crosscutting program.
Proposal Title: Future Wireless Broadband Access: Cross-Optimizing Hardware, Physical and Network Layers.

Cisco Systems Grant — May 2014
Proposal Title: Rateless encoded UDP for error-resilient wireless links.

Army Research Laboratory (ARL) Grant — Sep. 2009 - Aug. 2014
CTA: Communications and Networking Academic Research Center.
Proposal Title: QUANTA: Quality of Information-Aware Networks for Tactical Applications.

DoCoMo Labs Grant — Sep. 2011 - 2013
Proposal Title: MIMO systems with TDD

Cisco Systems Grant — Sep. 2011 - 2013
Proposal Title: Efficient airtime allocation in wireless networks.

Ming Hsieh Institute (MHI) Grant — May 2011 - 2013
Proposal Title: Large-Scale Software-Radio Testbed.

METRANS transportation center Grant — Aug. 2009 - Aug. 2010
Proposal title: End-to-end performance in vehicular networks with an emphasis on safety and security applications.

Cisco Systems Grant — Sep. 2008
Proposal Title: Neighborhood centric transport for home networking environments.

NSF NeTS Grant — Aug. 2008 - Aug. 2011
National Science foundation (NSF) award under the Networking Technology and Systems (NeTS) call.
Proposal title: Contention-Awareness in Mesh Transport: Theory and Practice.

Cisco Systems Grant — Apr. 2008
Proposal Title: TCP challenges in multi-hop wireless networks. From the networking workshop "The Future of TCP: Train-wreck or Evolution?".

VSoE Innovative Research Fund Grant — Dec. 2007 - Dec. 2008
Proposal title: Establishing a New USC Invited Workshop on Theory and Practice in Wireless Networks.

METRANS transportation center Grant — Oct. 2007 - Dec. 2008
Proposal title: Efficient Routing for Safety Applications in Vehicular Networks.

NSF NeTS Grant — Aug. 2005 - Aug. 2008
National Science foundation (NSF) award under the Networking Technology and Systems (NeTS) call.
Proposal title: Efficient Routing in Delay Tolerant Networking.

Zumberge Faculty Research and Innovation Grant — July 2005 - June 2006
Proposal title: Routing in Intermittently Connected Mobile Networks.

Charles Lee Powell Scholarship Grant — Dec. 2003 - Dec. 2004

Awards

ACM Distinguished Member — Nov. 2019
The ACM Distinguished Member program recognizes up to 10 percent of ACM worldwide membership with at least 15 years of professional experience who have achieved significant accomplishments or have made a significant impact on the computing field.

IEEE Fellow — Jan. 2018
The IEEE Grade of Fellow is conferred by the IEEE Board of Directors upon a person with an outstanding record of accomplishments in any of the IEEE fields of interest. The total number selected in any one year cannot exceed one-tenth of one- percent of the total voting membership. IEEE Fellow is the highest grade of membership and is recognized by the technical community as a prestigious honor and an important career achievement.

Distinguished Member of 2018 IEEE Infocom TPC Award — 2018
The IEEE Communications Society awards annually a select number of TPC members of its flagship conference IEEE Infocom with a Distinguished Member award.

Distinguished Member of 2016 IEEE Infocom TPC Award — 2016
The IEEE Communications Society awards annually a select number of TPC members of its flagship conference IEEE Infocom with a Distinguished Member award.

ACM Notable Article in Computing - Best of 2013 — 2014
Selection of paper "Modelling BitTorrent-like systems with many classes of users", W.-C. Liao, F. Papadopoulos, K. Psounis, and C. Psomas, ACM Transactions on Modelling and Computer Simulation, Vol. 23, Issue 2, Article No. 13, May 2013.

MEPC Business Plan Competition - 2nd place — 2013
Presentation of SpaceMUX Inc., a USC spinoff startup specializing in advanced physical layer techniques applied to next generation wireless networks.

ACM Senior Member Award — Jan. 2009
The Senior Member grade recognizes those ACM members with at least 10 years of prof essional experience and 5 years of continuous professional membership who have demonstrated performance that sets them apart from their peers.

IEEE Senior Member Award — Nov. 2008
Qualifications for this distinction are at least ten years of professional practice and five years of significant performance as demonstrated by substantial engineering responsibility or achievement, publication of engineering and technical papers, books or inventions, and the development and teaching of engineering courses.

Future of TCP Best Presentation Award — Apr. 2008
"Best and Most Compelling Presentation and Demonstration Award" at the networking workshop "The Future of TCP: Train-wreck or Evolution?" held at Stanford University and sponsored by Cisco Systems.

Zumberge Faculty Research and Innovation Award — July 2005
The James H. Zumberge faculty research and innovation award is granted to a selected number of Professors at the University of Southern California.

Charles Lee Powell Scholarship Award — Dec. 2003
The Charles Lee Powell award is granted to a selected number of Assistant Professors at the University of Southern California.

Illeana and Eric Benhamou Stanford Graduate Fellowship 1997 - 2002
Fellowship is awarded for four years to a very select number of PhD students based on academic merit.

Best-student National Technical University of Athens award 1997
Awarded yearly to the student that graduates with the highest GPA across all departments of National Technical University of Athens.

Other graduate studies awards 1997 - 1998
Regent's Fellowship by University of California Berkeley, Charles Lee Powell Foundation Graduate Fellowship by Caltech, Gordon Y. S. Wu Fellowship in Engineering by Princeton University, Sage Fellowship by Cornell University.

Publications Conference, Peer-reviewed, Full-length Papers

1. M Li, J Zhong, T Chen, Y Lai, K Psounis, "EEE-Bench: A Comprehensive Multimodal Electrical And Electronics Engineering Benchmark", in *Proceedings of CVPR*, 2025.
2. J. Zhang, R. Sequeira, K. Psounis, "SpinML: Customized Synthetic Data Generation for Private Training of Specialized ML Models", in *Proceedings of PETS*, 2025.
3. T. Khezresmaeilzadeh, E. Zhu, D. J. Dubois, K. Psounis, D. Choffnes, "Echoes of Privacy: Uncovering the Profiling Practices of Voice Assistants", in *Proceedings of PETS*, 2025.
4. Jiang Zhang, Qiong Wu, Yiming Xu, Cheng Cao, Zheng Du, and Konstantinos Psounis, "Efficient Toxic Content Detection by Bootstrapping and Distilling Large Language Models", in *Proceedings of AAAI*, 2024.
5. Y. Hu, X. Ye, Y. Liu, S. Kundu, G. Datta, S. Mutnuri, N. Asavisanu, N.Ayanian, K. Psounis, and P. Beerel, "FireFly A Synthetic Dataset for Ember Detection in Wildfire", in *Proceedings of the 5th Workshop on Artificial Intelligence for Humanitarian Assistance and Disaster Response, at ICCV*, 2023.
6. J. Zhang, H. Askari, K. Psounis, and Z. Shafiq, "No Video Left Behind: A Utility-Preserving Obfuscation Approach for YouTube Recommendations", in *Proceedings of PETS*, 2023.
7. A. Elkordy, J. Zhang, Y. Ezzeldin, K. Psounis, and S. Avestimehr, "How Much Privacy Does Federated Learning with Secure Aggregation Guarantee?", in *Proceedings of PETS*, 2023.
8. H. Qiu, P.-H. Huang, N. Asavisanu, X. Liu, K. Psounis, and R. Govindan, "AutoCast: Scalable Infrastructure-less Cooperative Perception for Distributed Collaborative Driving", in *Proceedings of ACM MobiSyS* 2022.
9. J. Zhang, K. Psounis, H. Muhammad, and Z. Shafiq, "HARPO: Learning to Subvert Online Behavioral Advertising", in *Proceedings of NDSS*, 2022.
10. L. Clark, C. Andre, J. Galante, B.Krishnamachari, and K. Psounis, "TEAM: Trilateration for Exploration and Mapping with Robotic Networks", in *Proceedings of the 18th International Conference on Ubiquitous Robots*, July 2021.
11. L. Clark, J. Galante, B.Krishnamachari, and K. Psounis, "A Queue-Stabilizing Framework for Networked Multi-Robot Exploration", in *Proceedings of IEEE International Conference on Robotics and Automation (ICRA)*, May 2021.
12. P.-H. Huang and K. Psounis, "Efficient User-Cell Association for 360 Video Streaming over Wireless Networks", in *Proceedings of IFIP Networking*, June 2020.

13. A. Petropulu, K. Psounis, and A. Al Hilli, "MIMO Radar Privacy Protection Through Gradient Enforcement in Shared Spectrum Scenarios", in *Proceedings of IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN)*, Newark, NJ, November 2019.
14. E. Alimpertis, A. Markopoulou, C. T. Butts and K. Psounis, "City-Wide Signal Strength Maps: Prediction with Random Forests", in *Proceedings of WWW*, San Fransisco, CA, May 2019. (acceptance rate 15%)
15. A. Dimas, M. Clark, B. Li, K. Psounis and A. Petropulu, "On Radar Privacy in Shared Spectrum Scenarios", in *Proceedings of the International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Brighton, UK, May 2019.
16. K. Wang and K. Psounis. "Scheduling and Resource Allocation in 802.11ax", in *Proceedings of IEEE Infocom*, Honolulu, Hi, April 2018. (acceptance rate 19.2%)
17. M. Clark and K. Psounis. "Achievable Privacy-Performance Tradeoffs for Spectrum Sharing with a Sensing Infrastructure", in *Proceedings of the 14th Annual Conference on Wireless On-Demand Network Systems and Services (IFIP WONS)*, 8 pages (no pp. avail.), Isola, France, February 2018.
18. Y. Zhang and K. Psounis. "Efficient MU-MIMO via Switched-beam Antennas", in *Proceedings of ACM MOBIHOC*, 10 pages (no pp. avail.), Madras, India, July 2017. (acceptance rate 17%)
19. M. Clark and K. Psounis. "Designing Sensor Networks to Protect Primary Users in Spectrum Access Systems", in *Proceedings of the 13th Annual Conference on Wireless On-Demand Network Systems and Services (IFIP/IEEE WONS)*, 8 pages (no pp. avail.), Jackson, WY, February 2017. (acceptance rate 30%)
20. P.-H. Huang and K. Psounis. "Efficient mmwave wireless backhauling for dense small-cell deployments", in *Proceedings of the 13th Annual Conference on Wireless On-Demand Network Systems and Services (IFIP/IEEE WONS)*, 8 pages (no pp. avail.), Jackson, WY, February 2017. (acceptance rate 30%)
21. W. Chon Ao and K. Psounis. "An Efficient Approximation Algorithm for Online Multi-Tier Multi-Cell User Association", in *Proceedings of ACM MOBIHOC*, 10 pages (no pp. avail.), Paderborn, Germany, July 2016. (acceptance rate 18.7%)
22. H. Qiu, K. Psounis, G. Caire, K. Chugg and K. Wang. "High-Rate WiFi Broadcasting in Crowded Scenarios via Lightweight Coordination of Multiple Access Points", in *Proceedings of ACM MOBIHOC*, 10 pages (no pp. avail.), Paderborn, Germany, July 2016. (acceptance rate 18.7%)
23. M. Clark and K. Psounis. "Can the Privacy of Primary Networks in Shared Spectrum be Protected?", in *Proceedings of IEEE INFOCOM*, 9 pages (no pp. avail.), San Fransisco, April 2016. (acceptance rate 18.2%)
24. G. Zois, A. Michaloliakos, K. Psounis, V. Vassalos and I. Mourtos. "Non-asymptotic performance bounds for downlink MU-MIMO scheduling", in *Proceedings of the 12th Annual Conference on Wireless On-Demand Network Systems and Services (IFIP WONS)*, 8 pages (no pp. avail.), Italy, January 2016. (acceptance rate 30%)
25. W. Chon Ao and K. Psounis. "Distributed Caching and Small Cell Cooperation for Fast Content Delivery", in *Proceedings of ACM MOBIHOC*, pp. 127–136, Hangzhou, China, June 2015. (acceptance rate 14.8%)
26. M. Clark and K. Psounis. "Efficient Resource Scheduling for a Secondary Network in Shared Spectrum", in *Proceedings of IEEE INFOCOM*, pp. 1257–1265, Hong Kong, April 2015. (acceptance rate 19.0%)
27. R. Pal, L. Golubchik, K. Psounis, and P. Hui. "Will Cyber-Insurance Improve Network Security? A Market Analysis", in *Proceedings of IEEE INFOCOM*, pp. 235–243, Toronto, Canada, April 2014. (acceptance rate 19.4%)

28. E. N. Ciftcioglu, A. Michaloliakos, K. Psounis, T. La Porta, and A. Yener. "Power Minimization with Quality-of-Information Outages", in *Proceedings of the IEEE Wireless Communications and Networking Conference (WCNC)*, pp. 1655–1660, Istanbul, Turkey, April 2014.
29. R. Pal, L. Golubchik, K. Psounis, and P. Hui. "On A Way to Improve Cyber-Insurer Profits: When A Security Vendor Becomes the Cyber-Insurer", in *Proceedings of IFIP NETWORKING*, 9 pages (no pp. avail.), New York, May 2013. (acceptance rate 26.2%)
30. H. V. Balan, M. Segura, S. Deora, A. Michaloliakos, R. Rogalin, K. Psounis and G. Caire. "USC SDR, an easy-to-program, high data rate, real time software radio platform", in *Proceedings of the ACM SIGCOMM workshop of Software Radio Implementation Forum (SRIF 2013)*, pp. 25–30, Hong Kong, China, August 2013.
31. A. Michaloliakos, R. Rogalin, H. V. Balan, K. Psounis and G. Caire. "Efficient MAC for distributed multiuser MIMO systems", in *Proceedings of the 10th Annual Conference on Wireless On-Demand Network Systems and Services (IFIP/IEEE WONS)*, pp. 52–59, Alberta, March 2013.
32. H. V. Balan, R. Rogalin, A. Michaloliakos, K. Psounis and G. Caire, "Achieving High Data Rates in a Distributed MIMO System", in *Proceedings of ACM MOBICOM*, pp. 41–52, Istanbul, Turkey, August 2012. (acceptance rate 15.1%)
33. M. Mongiovi, A. Singh, X. Yan, B. Zong, and K. Psounis, "Efficient multicasting for delay tolerant networks using graph indexing", in *Proceedings of IEEE INFOCOM*, pp. 1386–1394, Orlando, Florida, March 2012. (acceptance rate 18.0%)
34. R. Pal, L. Golubchik, and K. Psounis. "Aegis: A Novel Cyber-Insurance Model", in *Proceedings of the 2nd Conference on Decision and Game Theory for Security (GameSec 2011)*, pp. 131–150, College Park, Maryland, November 2011.
35. E. N. Ciftcioglu, A. Yener, R. Govindan, and K. Psounis. "Operational Information Content Sum Capacity: Formulation and Examples", in *Proceedings of the 14th International Conference on Information Fusion (FUSION)*, pp. 1–7, Chicago, July 2011.
36. K.-Y. Jang, K. Psounis, and R. Govindan. "Simple Yet Efficient, Transparent Airtime Allocation for TCP in Wireless Mesh Networks", in *Proceedings of ACM CoNEXT*, article no. 28, 12 pages, Philadelphia, December 2010. (acceptance rate 19%)
37. A. Jindal and K. Psounis. "Making the Case for Random Access Scheduling in Wireless Multi-hop Networks", in *Proceedings of IEEE INFOCOM*, (mini-conference), pp. 1–5, San Diego, California, March 2010. (acceptance rate 24%)
38. S. Rangwala, A. Jindal, K.-Y. Jang, K. Psounis, and R. Govindan. "Understanding Congestion Control in Multi-hop Wireless Mesh Networks", in *Proceedings of ACM MOBICOM*, pp. 291–302, San Fransisco, California, September 2008. (acceptance rate 12%)
39. F. Papadopoulos and K. Psounis. "Scaling Properties of IEEE 802.11 Wireless Networks", in *Proceedings of the 6th Intl. Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, 8 pages (no pp. avail.), Berlin, Germany, March 2008.
40. W.-C. Liao, F. Papadopoulos and K. Psounis. "Performance Analysis of BitTorrent-like Systems with Heterogeneous Users", in *Proceedings of the 26th International Symposium on Computer Performance, Modeling, Measurements and Evaluation (IFIP Performance)*, pp. 876–891, Cologne, Germany, October 2007. (acceptance rate 23%)
41. W.-J. Hsu, T. Spyropoulos, K. Psounis and A. Helmy. "Modeling Time-variant User Mobility in Wireless Mobile Networks", in *Proceedings of IEEE INFOCOM*, pp. 758–766, Anchorage , Alaska , USA, May 2007. (acceptance rate 18%)

42. A. Jindal, and K. Psounis. "Contention-Aware Analysis of Routing Schemes for Mobile Opportunistic Networks", in *Proceedings of ACM MOBISYS, on the 1st International Workshop on Mobile Opportunistic Networking (MobiOpp)*, pp. 1–8, San Juan, Puerto Rico, June 2007.
43. F. Papadopoulos and K. Psounis. "Predicting the Performance of Mobile Ad hoc Networks Using Scaled-down Replicas", in *Proceedings of IEEE International Conference on Communications (ICC)*, pp. 3928-3935, Glasgow, Scotland, June 2007.
44. T. Spyropoulos, K. Psounis, and C. Raghavendra. "Spray and Focus: Efficient Mobility-Assisted Routing for Heterogeneous and Correlated Mobility", in *Proceedings of IEEE PERCOM, on the International Workshop on Intermittently Connected Mobile Ad hoc Networks (ICMAN)*, pp. 79–85, New York City, USA, March 2007.
45. A. Jindal and K. Psounis. "Fundamental Mobility Properties for Realistic Performance Analysis of Intermittently Connected Mobile Networks", in *Proceedings of IEEE PERCOM, on the International Workshop on Intermittently Connected Mobile Ad hoc Networks (ICMAN)*, pp. 59–64, New York City, USA, March 2007.
46. S. Rangwala, R. Gummandi, R. Govindan, and K. Psounis. "Interference-aware fair rate control in wireless sensor networks", in *Proceedings of ACM SIGCOMM*, pp. 63–74, Pisa, Italy, September 2006. (acceptance rate 12%)
47. T. Spyropoulos, K. Psounis, and C. Raghavendra, "Performance Analysis of Mobility-assisted Routing, in *Proceedings of ACM MOBIHOC*, pp. 49–60, Florence, Italy, May 2006. (acceptance rate 10%)
48. W.-C. Liao, F. Papadopoulos, and K. Psounis. "An Efficient Algorithm for Resource Sharing in Peer-to-peer Networks", in *Proceedings of IFIP Networking*, pp. 592–605, Coimbra, Portugal, May 2006. (acceptance rate 20%)
49. A. Jindal and K. Psounis. "Performance Analysis of Epidemic Routing under Contention", in *Proceedings of IWCMC*, pp. 539–544, Vancouver, Canada, July 2006.
50. K. Psounis, P. Molinero Fernandez, B. Prabhakar, and F. Papadopoulos. "Systems with Multiple Servers under Heavy-tailed Workloads", in *Proceedings of the 24th International Symposium on Computer Performance, Modeling, Measurements and Evaluation (IFIP Performance)*, pp. 456–474, Juan-les-Pins, France, October 2005. (acceptance rate 22%)
51. A. Jindal and K. Psounis. "Modeling Spatially-correlated Data of Sensor Networks with Irregular Topologies", in *Proceedings of IEEE SECON*, pp. 305–316, Santa Clara, California, USA, October 2005. (acceptance rate 27%)
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49. K. Psounis. "Active Networks, Applications, Security, Safety, and Architectures", *IEEE Communications Surveys Magazine*, Vol. 2, No. 1, pp. 1–16, 1st quarter 1999.

Book Chapters

1. K. Psounis and M. Clark. Privacy in Spectrum Sharing Systems with Applications to Communications and Radar, In *Signal Processing for Joint Radar-Communications*, Wiley-IEEE Press, 2021.

Invited Journals

1. T. Spyropoulos, A. Jindal, and K. Psounis. "An Analytical Study of Fundamental Mobility Properties for Encounter-based Protocols", *International Journal of Autonomous and Adaptive Communications Systems*, Vol. 1, Issue 1, pp. 440, July 2008.

Invited Conference Papers

1. L. Clark, M. Clark, K. Psounis and P. Kairouz. "Privacy-utility trades in wireless data via optimization and learning", in *Proceedings of the Information Theory and Applications Workshop (ITA)*, 10 pages (no pp. avail.), San Diego, California, USA, February 2019.
2. A. Dimas, B. Li, M. Clark, K. Psounis, A. Petropulu. "Spectrum Sharing Between Radar and Communication systems: Can the Privacy of the Radar be Preserved?", in *Proceedings of the Asilomar Conference on Signals, Systems and Computers*, Pacific Grove, California, USA, October 2017.
3. A. Michaloliakos, W. Chon Ao and K. Psounis. "Joint user-beam selection for hybrid beamforming in asynchronously coordinated multi-cell networks", in *Proceedings of the Information Theory and Applications Workshop (ITA)*, 10 pages (no pp. avail.), San Diego, California, USA, February 2016.
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6. D. Antonellis, A. Mansy, K. Psounis, and M. Ammar. "Real time, distributed network classification for routing protocol selection in mobile ad hoc networks", in *Proceedings of the fourth international wireless Internet conference (WICON)*, 8 pages (no pp. avail.), Maui, Hawaii, November 2008.
7. Y. Wang, A. Ahmed, B. Krishnamachari, and K. Psounis. "IEEE 802.11p performance evaluation and protocol enhancement", in *Proceedings of the IEEE International Conference on Vehicular Electronics and Safety*, pp. 317–322, Columbus, Ohio, USA, September 2008.
8. A. Jindal and K. Psounis. "Achievable Rate Region and Optimality of Multi-hop Wireless 802.11-Scheduled Networks", in *Proceedings of the Information Theory and Applications Workshop (ITA)*, 7 pages (no pp. avail.), San Diego, California, USA, January 2008.
9. F. Papadopoulos and K. Psounis. "Application of the many sources asymptotic in downscaling Internet-like networks", in *Proceedings of the Information Theory and Applications Workshop (ITA)*, pp. 314–322, San Diego, California, USA, January 2007.
10. A. Jindal and K. Psounis. "Optimizing Multi-Copy Routing Schemes for Resource Constrained Intermittently Connected Mobile Networks", in *Proceedings of the Fortieth Asilomar Conference on Signals, Systems and Computers*, pp. 2142–2146, Pacific Grove, California, USA, October 2006.

Citations

- Total citations: 14776
- h-index: 41

(source: google scholar, accessed: January 2025)

Teaching experience

- Co-creator and instructor for the USC graduate class EE597: "Wireless Networks". Content: Introduction to current and next generation wireless networking technologies, detailed exploration of fundamental architectural and design principles used at all layers.
- Instructor for the USC graduate class EE503: "Probability for Electrical and Computer Engineering". Content: Probability, discrete and continuous time Markov chains, basic queueing theory.
- Instructor for the USC undergrad class EE465: "Probabilistic Methods in Computer Systems Modelling". Content: Probability, Markov chains, simulations.
- Creator and instructor for the USC graduate class EE650: "Advance Topics in Computer Networks: Mathematical tools for analyzing wired and wireless networks". Content: Applications to networking problems of probability, queueing, Lyapunov functions, fluid limits, bipartite matchings, stable marriages, random walks on graphs, deterministic and stochastic optimization, statistical analysis, information theory, game theory.

Issued Patents

- G. Caire, K. Psounis. Composite beamforming to coordinate concurrent WLAN links. Quantenna Communications, Inc.
  US Patent No. 9,479,240, issued Oct. 2016.
- K. Psounis, G. Caire, H. V. Balan. AirSync: enabling distributed multiuser MIMO with full multiplexing gain. USC.
  US Patent No. 61,651,964, issued Jan. 2015.
- K. Psounis and J. Jawahar. Method and System for Class-based Management of Dynamic Content in a Networked Environment. Cisco Systems, Inc.
  US Patent No. 7,802,014, issued Sep. 2010.
- R. Pan, B. Prabhakar and K. Psounis. A Stateless Active Queue Management Scheme for Approximating Fair Bandwidth Allocation. Stanford.
  US Patent No. 7,324,442, issued Jan. 2008.

Selected Professional Service

International Conferences - Organizing/Executive Committee

- Steering Committee, IFIP/IEEE WONS, 2017 - now.
- General Chair, ACM SIGMETRICS, 2018.
- General Chair, IFIP/IEEE WONS, 2017.
- Program Chair, IFIP/IEEE WONS, 2016.
- Program Chair, IEEE DCOSS workshop on Wireless Sensor Networks (PWSN), 2014.
- Program Chair, ACM MOBICOM workshop on Challenged Networks (CHANTS), 2008.
- Workshop Chair, ACM SIGMETRICS 2008.
- Workshop Chair, USC Workshop on Theory and Practice in Wireless Networks, 2008.
- Publication Chair, ACM SIGMETRICS 2007.
- Panel Chair, ACM MOBIHOC, 2009.
- Panel Chair, IEEE CCW, 2008.

International Conferences - Technical Program Committee

- IFIP/IEEE WONS 2013 - 2014, 2018, 2022
- IEEE INFOCOM 2005 - 2020.
- ACM SIGMETRICS 2008, 2014, 2015, 2017, 2020.
- ACM MOBIHOC, 2008 - 2010, 2017-2020.

- WiOpt 2016-2017.
- IEEE SECON 2007 - 2010.
- IFIP NETWORKING 2006 - 2010.
- ACM MOBICOM, 2009.
- IEEE ICNP 2009.
- IEEE WOWMOM workshop on Autonomic and Opportunistic Communications (AOC), 2008 -2009.
- IEEE ICDCS workshop on Delay Tolerant Mobile Networks (DTMN), 2008.
- ACM MOBISYS workshop on Mobile Opportunistic Networks (MOBIOPP), 2007.
- IEEE PERCOM workshop on Intermittently Connected Mobile Ad hoc Networks (ICMAN), 2007.

Journals

- Editorial Board, IEEE/ACM Transactions on Networking (ToN), 2015 - 2020.
- Editorial Board, IEEE Transactions on Mobile Computing (TMC), 2009 - 2019.
- Editorial Board, Computer Networks Journal, Elsevier, 2009 - 2010.
- Editorial Board, International Journal of Autonomous and Adaptive Communications Systems (IJAACS), 2008.
- Reviewer of IEEE/ACM Transactions on Networking, IEEE Journal on Selected Areas in Communication, IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Mobile Computing, ACM Transactions on Sensor networks, Elsevier Computer Networks Journal, Elsevier Performance Evaluation Journal, Elseviers Ad Hoc Networks Journal, Transportation Research Journal Part C, IEEE Transactions on Automatic Control.

Governmental Agencies

- NSF ML panel, 2020.
- NSF CAREER panel, 2019.
- NSF EARS meeting, 2016.
- NSF Future Internet Architecture Summit participant, 2009.
- NSF CRI panel member, 2008.
- NSF Wireless mobile workshop participant, 2007.
- NSF NeTS-NOSS panel member, 2005.
- Reviewer of NSF NeTS proposals.

Professional Associations

- Institute of Electrical and Electronic Engineers (IEEE):
  IEEE Fellow, 2018 - now.
  Senior Member, 2008 - 2017.
  Member, 1998 - 2008.
- Association for Computing Machinery (ACM):
  ACM Distinguished Member, 2019 - now.
  Senior Member, 2009 - 2018.
  Member, 2001 - 2008.
- Technical Institution of Greece (TEE), 1997 - now.

Languages English, Greek, French.

Personal Married, three children.