CAMELLIA ZAKARIA

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RESEARCH KEYWORDS

smart health, mobile and ubiquitous sensing, human computer interaction, applied machine learning

EXPERIENCE

Assistant Professor University of Toronto, Canada Dalla Lana School of Public Health	2023 - Present
Postdoctoral Research Fellow University of Massachusetts Amherst (UMASS Amherst), USA Manning College of Information and Computer Sciences	2020 - 2023
Postdoctoral Research Fellow Singapore University of Technology and Design (SUTD), Singapore Information Systems Technology and Design Pillar	2020
Research Engineer Singapore Management University (SMU), Singapore School of Computing and Information Systems	2013 - 2014
Undergraduate Research Intern Singapore Management University (SMU), Singapore Living Analytics Research Center	2012
Lab Officer Agency for Science, Technology and Research (ASTAR), Singapore Institute for Infocomm Research	2007 - 2009
EDUCATION	

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Singapore Management University, Singapore	
School of Computing and Information Systems	
Ph.D. in Information Systems	2014 - 2019
B.Sc in Information Systems	2009 - 2013
Carnegie Mellon University, USA	
Heinz College of Information Systems and Public Policy	
Exchange Student during Fall	2016
Temasek Polytechnic, Singapore	
School of Informatics	

PUBLICATION

Diploma in Internet Computing

1. C. ZAKARIA, P. S. Foong, P. VS Pakianathan, and G. H. C. Koh, "Who are the Digital Proxies?: Results from a Survey on the Prevalence and Predictors of Digital Proxy Behavior in the United States," In review for the Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI), 2024.

2004 - 2007

- B. Chhaglani, C. ZAKARIA, R. Peltier, J. Gummeson, and P. Shenoy, "AeroSense: Sensing Aerosol Emissions from Indoor Human Activities," *In review* for the Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2024.
- 3. A. Atrey, C. ZAKARIA, R. Balan, and P. Shenoy, "W4-groups: Modeling the who, what, when and where of group behavior via mobility sensing," Proceedings of the ACM on Human-Computer Interaction (CSCW), 2024. [To appear]
- 4. P. Mammen, C. ZAKARIA, and P. Shenoy, "SleepLess: Personalized Sleep Monitoring Using Smartphones and Semi-supervised Learning," 17th EAI International Conference on Pervasive Computing Technologies for Healthcare, 2023. [To appear]
- 5. C. ZAKARIA, G. Yilmaz, P. Mammen, M. Chee, R. Balan, and P. Shenoy, "SleepMore: Inferring Sleep Duration at Scale via Multi-Device WiFi Sensing," Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2023.
- 6. C. ZAKARIA, P. S. Foong, C. S. Lim, P. VS Pakianathan, G. H. C. Koh, and S. T. Perrault, "Does mode of digital contact tracing affect user willingness to share information? a quantitative study," Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI), pp. 1–18, 2022.
- 7. C. ZAKARIA, A. Trivedi, E. Cecchet, M. Chee, P. Shenoy, and R. Balan, "Analyzing the impact of covid-19 control policies on campus occupancy and mobility via wifi sensing," ACM Transactions on Spatial Algorithms and Systems (TSAS), vol. 8, no. 3, 2022.
- 8. B. Chhaglani, C. ZAKARIA, A. Lechowicz, J. Gummeson, and P. Shenoy, "Flowsense: Monitoring airflow in building ventilation systems using audio sensing," Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), vol. 6, no. 1, pp. 1–26, 2022.
- 9. **C. ZAKARIA**, Y. Lee, and R. Balan, "Detection of social identification in workgroups from a passively-sensed wifi infrastructure," Proceedings of the ACM on Human-Computer Interaction (CSCW), vol. 5, pp. 1–19, 2021.
- 10. A. Trivedi, C. ZAKARIA, R. Balan, A. Becker, G. Corey, and P. Shenoy, "Wifitrace: Network-based contact tracing for infectious diseases using passive wifi sensing," Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), vol. 5, no. 1, pp. 1–26, 2021.
- 11. **C. ZAKARIA**, R. Balan, and Y. Lee, "Stressmon: Scalable detection of perceived stress and depression using passive sensing of changes in work routines and group interactions," Proceedings of the ACM on Human-Computer Interaction (CSCW), vol. 3, no. 37, pp. 1–29, 2019.
- Q. Roy, C. ZAKARIA, S. Perrault, M. Nancel, W. Kim, A. Misra, and A. Cockburn, "A Comparative Study of Pointing Techniques for Eyewear Using a Simulated Pedestrian Environment," Proceedings of the IFIP Conference on Human-Computer Interaction (INTERACT), pp. 625-646, 2019.
- 13. C. ZAKARIA, R. C. Davis, and Z.Walker, "Seeking independent management of problem behavior: A proof-of-concept study with children and their teachers," Proceedings of the 15th International Conference on Interaction Design and Children (IDC), pp. 196–205, 2016.

Demo/Poster/Workshop Paper:

 A. Souza, M. Shenoy, and C. ZAKARIA, "Empowering User-Centered Carbon Management: Bridging Individual Preferences and Sociotechnical Advancements," In review for the 1st International Workshop on Cyber-Physical-Social Infrastructure Systems, 2023.

- 2. B. Chagglani, C. ZAKARIA, J. Gummeson, and P. Shenoy, "BreathEasy: Exploring the Potential of Acoustic Sensing for Healthy Indoor Environments," Proceedings of the 1st International Workshop on Advances in Environmental Sensing Systems for Smart Cities, pp. 25-30, 2023.
- 3. C. ZAKARIA, K. Goh, Y. Lee, and R. Balan, "Exploratory Analysis of Individuals' Mobility Patterns and Experienced Conflicts in Workgroups," Proceedings of the 5th ACM Workshop on Mobile Systems for Computational Social Science, pp. 27-31, 2019.
- 4. K. Jayarajah, M. Radhakrishnan, and C. ZAKARIA, "Duplicate issue detection for the android open source project," Proceedings of the 5th International Workshop on Software Mining, pp. 24-31, 2016.
- 5. **C. ZAKARIA**, and R. Davis, "Wearable application to manage problem behavior in children with neurodevelopmental disorders," Proceedings of the 14th Annual International Conference on Mobile Systems, Applications, and Services Companion, pp. 127-127, 2016.
- 6. R. Davis, and C. ZAKARIA, "K-Sketch: Digital storytelling with animation sketches," International Conference on Interactive Digital Storytelling, pp. 242-245, 2014.

AWARDS & MEDIA

BBC Worklife: The Campus as a Laboratory, Making an Impact	2019
Research@SMU: Monitoring and Addressing Stress	2019
Awarded Best User Experience and Best Project Management for final year capstone, SMU	2013
Awarded Best Project Award for final year capstone, TP	2007
Awarded Honor's List during third-year study, TP	2006
Awarded Directors's List during second-year study, TP	2005

SERVICE

COMSNETS: Publicity Co-Chair	2023
ACM CHI: Late Breaking Work Program Committee, Assoc. Chair	2021-2023
ACM IMWUT: Student Volunteer Co-chair	2018
ACM SIGGRAPH Asia: Student Volunteer Co-chair	2012
ACM SIGGRAPH Singapore Chapter: Secretary	2010-2013

ACM IMWUT, CSCW, CHI: Active reviewer

2018 - Present

TEACHING

Program Co-director UMass Amherst Summer Turing Program	2022
Teaching Assistantship SMU IS306 course	2015

Dr. Prashant SHENOY

Distinguished Professor and Associate Dean College of Information and Computer Sciences, University of Massachusetts Amherst, USA

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Dr. Zachary WALKER

Head of Department Psychology and Human Development, Institute of Education, University College London, UK

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Dr. Rajesh BALAN

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