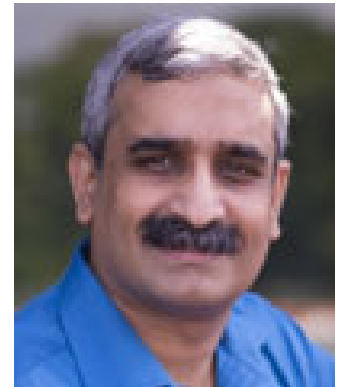


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Education

PhD, Carnegie Mellon University, United States of America, 2006
Master of Science, National University of Singapore, Singapore, 2000
Bachelor of Science, National University of Singapore, Singapore, 1998

Academic Appointments

Professor of Computer Science, School of Computing and Information Systems, SMU, Jan 2024 - Present
Associate Professor of Computer Science, School of Computing and Information Systems, SMU, Apr 2021 - Present
Associate Professor of Information Systems, School of Computing and Information Systems, SMU, Jul 2013 - Mar 2021
Assistant Professor of Information Systems, School of Computing and Information Systems, SMU, Jul 2006 - Jun 2013

Academic Administrative Positions

Director, LiveLabs Urban Lifestyle Innovation Platform, Livelabs Urban Lifestyle Innovation Platform, SMU, Jul 2015 - Mar 2019
Co-Director, LiveLabs Urban Lifestyle Innovation Platform, Livelabs Urban Lifestyle Innovation Platform, SMU, Jul 2012 - Jun 2015

Awards and Honors

ACM Distinguished Member, Association for Computing Machinery, 2018

RESEARCH

Research Interests

Mobile and pervasive computing
 Operating systems
 Distributed computing
 Software engineering
 Usability of software systems
 Usability testing
 Networking

Publications

Journal Articles [Refereed]

Tracking people across ultra populated indoor spaces by matching unreliable Wi-Fi signals with disconnected video feeds, by TRUONG, Hai; JAISINGHANI, Dheryta; JAIN, Shubham; SINGHA, Arunesh; KO, Jeong Gil; BALAN, Rajesh. (2024). *Pervasive and Mobile Computing*, 97 1-20. <https://doi.org/10.1016/j.pmcj.2023.101860> (Published)

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Detection of social identification in workgroups from a passively-sensed WiFi infrastructure, by ZAKARIA, Camellia; LEE, Youngki; BALAN, Rajesh. (2021). *Proceedings of the ACM on Human-Computer Interaction*, 5 (CSCW1), 1-19. <https://doi.org/10.1145/3449145> (Published)

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FogFly: A traffic light optimization solution based on fog computing, by MINH, Quang Tran; TRAN, Chanh Minh; LE, Tuan An; NGUYEN, Binh Thai; TRAN, Triet Minh; BALAN, Rajesh Krishna. (2018.0). *UbiComp '18: Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers, Singapore, October 8-12*, (pp. 1130-1139) New York: ACM. <https://doi.org/10.1145/3267305.3274169> (Published)

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2018: *Proceedings of the 19th IEEE International Symposium on A World of Wireless, Mobile and Multimedia Networks, Chania, Crete, Greece, June 12-15*, (pp. 1-6) Los Alamitos, CA: IEEE Computer Society. <https://doi.org/10.1109/WoWMMoM.2018.8449755> (Published)

Smart monitoring via participatory BLE relaying, by RADHAKRISHNAN, Meera; SEN, Sougata; MISRA, Archan; LEE, Youngki; BALAN, Rajesh Krishna. (2018.0). *2018 10th International Conference on Communication Systems & Networks (COMSNETS): Bengaluru, India, January 3-7: Proceedings*, (pp. 312-319) Piscataway, NJ: IEEE. <https://doi.org/10.1109/COMSNETS.2018.8328213> (Published)

TagScan: Simultaneous target imaging and material identification with commodity RFID devices, by WANG, Ju; XIONG, Jie; CHEN, Xiaojiang; JIANG, Hongbo; BALAN, Rajesh Krishna; FANG, Dingyi. (2017.0). *MobiCom '17: Proceedings of the 23rd Annual International Conference on Mobile Computing and Networking, Snowbird, UT, October 16-20*, (pp. 288-300) New York: ACM. <https://doi.org/10.1145/3117811.3117830> (Published)

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Experiences in building a real-world eating recogniser, by SEN, Sougata; SUBBARAJU, Vigneshwaran; MISRA, Archan; BALAN, Rajesh Krishna; LEE, Youngki. (2017.0). *WPA '17: Proceedings of the 4th International on Workshop on Physical Analytics, Niagara Falls, June 19*, (pp. 7-12) New York: ACM. <http://doi.org/10.1145/3092305.3092306> (Published)

Empath-D: Empathetic design for accessibility, by CHOO, Kenny Tsu Wei; BALAN, Rajesh Krishna; TAN, Kiat Wee; MISRA, Archan; LEE, Youngki. (2017.0). *HotMobile '17: Proceedings of the 18th International Workshop on Mobile Computing Systems and Applications, Sonoma, CA, February 21-22*, (pp. 55-60) New York: ACM. <https://doi.org/10.1145/3032970.3032981> (Published)

DeepSense: A GPU-based deep convolutional neural network framework on commodity mobile devices, by HUYNH, Loc Nguyen; BALAN, Rajesh Krishna; LEE, Youngki. (2016.0). *WearSys'16: Proceedings of the 2016 Workshop on Wearable Systems and Applications: June 30, 2016, Singapore*, (pp. 25-30) New York: ACM. <http://doi.org/10.1145/2935643.2935650> (Published)

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- IoT+Small Data: Transforming in-store shopping analytics and services, by RADHAKRISHNAN, Meera; SEN, Sougata; SUBBARAJU, Vigneshwaran; MISRA, Archan; BALAN, Rajesh. (2016.0). *2016 8th International Conference on Communication Systems and Networks: COMSNETS 2016, Bangalore, India, January 5-10 [COMSNETS Workshop: Wild and Crazy Ideas on the interplay between IoT and Big Data WACI]*, Piscataway, NJ: IEEE. <https://doi.org/10.1109/COMSNETS.2016.7439946> (Published)
- Real-time detection of seat occupancy and hogging, by NGUYEN, Huy Hoang; GULATI, Nakul; LEE, Youngki; BALAN, Rajesh Krishna. (2015.0). *IoT-App '15: Proceedings of the 2015 International Workshop on Internet of Things towards Applications: Seoul, Korea, November 1*, (pp. 29-34) New York: ACM. <https://doi.org/10.1145/2820975.2820981> (Published)
- Smartphones and BLE services: Empirical insights, by RADHAKRISHNAN, Meera; MISRA, Archan; BALAN, Rajesh Krishna; LEE, Youngki. (2015.0). *IEEE International Conference on Mobile Ad Hoc and Sensor Systems MASS 2015: October 19-22, Dallas, Texas: Proceedings*, (pp. 226-234) Los Alamitos, CA: IEEE Computer Society. <https://doi.org/10.1109/MASS.2015.92> (Published)
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- GameOn: p2p gaming on public transport, by ZHANG, Nairan, LEE, Youngki, RADHAKRISHNAN, Meera, BALAN, Rajesh Krishna. (2015.0). *MobiSys '15: Proceedings of the 13th Annual International Conference on Mobile Systems, Applications, and Services: May 19-22, Florence, Italy*, (pp. 105-119) New York: ACM. <https://doi.org/10.1145/2742647.2742660> (Published)
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- QueueVadis: Queuing analytics using smartphones, by OKOSHI, Tadashi; LU, Vu; VIG, Chetna; LEE, Youngki; BALAN, Rajesh Krishna; MISRA, Archan. (2015.0). *IPSN '15: Proceedings of the 14th International Conference on Information Processing in Sensor Networks, Seattle, 13-16 April*, (pp. 214-225) New York: ACM. <https://doi.org/10.1145/2737095.2737120> (Published)
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- myDeal: A mobile shopping assistant matching user preferences to promotions, by MURALIDHARAN, Kartik; GOTTIPATI, Swapna; JIANG, Jing; RAMSUBBU, Narayan; BALAN, Rajesh Krishna. (2014.0). *MOBIQUITOUS '14: Proceedings of the 11th International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services: 2-5 December, London*, (pp. 238-247) Brussels: ICST. <https://doi.org/10.4108/icst.mobiquitous.2014.257708> (Published)
- GruMon: Fast and accurate group monitoring for heterogeneous urban spaces, by SEN, Rijurekha; LEE, Youngki; JAYARAJAH, Kasthuri; BALAN, Rajesh Krishna; MISRA, Archan. (2014.0). *SenSys '14: Proceedings of the 12th ACM Conference on Embedded Network Sensor Systems: Memphis, TN, November 3-6*, (pp. 46-60) New York: ACM. <https://doi.org/10.1145/2668332.2668340> (Published)
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LiveLabs: Building in-situ mobile sensing & behavioural experimentation testbeds, by BALAN, Rajesh Krishna; MISRA, Archan; LEE, Youngki. (2014.0). *HotMobile '14: Proceedings of the 15th Workshop on Mobile Computing Systems and Applications, Santa Barbara, CA, February 26-27*, (pp. 14-1-6) New York: ACM. <https://doi.org/10.1145/2565585.2565597> (Published)

Mobile platform and application research at SMU LiveLabs, by GOTTIPATI, Swapna; SEBASTIAN, Jeena; TUAN, Luong Trung; TAN, Kiat Wee; CHAN, Joseph Joo Keng; MURALIDHARAN, Kartik; OKOSHI, Tadashi; LEE, Youngki; MISRA, Archan; BALAN, Rajesh Krishna. (2014.0). *2014 6th International Conference on Communication Systems and Networks (COMSNETS): Bangalore, India, January 7-10*, (pp. 1-4) Piscataway, NJ: IEEE. <https://doi.org/10.1109/COMSNETS.2014.6734911> (Published)

The challenge of continuous mobile context sensing, by BALAN, Rajesh Krishna; LEE, Youngki; TAN, Kiat Wee; MISRA, Archan. (2014.0). *2014 6th International Conference on Communication Systems and Networks (COMSNETS): January 6-10, Bangalore*, (pp. 1-8) Piscataway, NJ: IEEE. <https://doi.org/10.1109/COMSNETS.2014.6734869> (Published)

Challenges and opportunities in taxi fleet anomaly detection, by SEN, Rijurekha; BALAN, Rajesh Krishna. (2013.0). *SENSEMIN'13: Proceedings of the 1st International Workshop on Sensing and Big Data Mining, Rome, Italy, November 11-15*, (pp. 1-6) New York: ACM. <https://doi.org/10.1145/2536714.2536715> (Published)

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The case for mobile forensics of private data leaks: Towards large-scale user-oriented privacy protection, by CHAN, Joseph Joo Keng; TAN, Kiat Wee; JIANG, Lingxiao; BALAN, Rajesh Krishna. (2013.0). *APSys '13: Proceedings of the 4th Asia-Pacific Workshop on Systems: Singapore, 29-30 July*, (pp. 1-7) New York: ACM. <https://doi.org/10.1145/2500727.2500733> (Published)

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Overcoming the challenges in cost estimation for distributed software projects, by RAMASUBBU, Narayanasamy; BALAN, Rajesh Krishna

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Dynamic lookahead mechanism for conserving power in multi-player mobile games, by THIRUGNANAM, Karthik; ANAND, Bhojan; SEBASTIAN, Jeena; KANNAN, Pravein; ANANDA, Akhihebbal L.; BALAN, Rajesh Krishna; CHAN, Mun Choon. (2012.0). *2012 IEEE INFOCOMM International Conference on Computer Communications, Orlando, Florida, 25-30 March: Proceedings*, (pp. 2721-2725) Piscataway, NJ: IEEE. <https://doi.org/10.1109/INFCOM.2012.6195687> (Published)

HuMan: Creating memorable fingerprints of mobile users, by PAYAS, Gupta; TAN, Kiat Wee; RAMASUBBU, Narayanasamy; LO, David; GAO, Debin; BALAN, Rajesh Krishna. (2012.0). *2012 IEEE International Conference on Pervasive Computing and Communications Workshops: Lugano, Switzerland, 19-23 March: Proceedings*, (pp. 479-482) Piscataway, NJ: IEEE. <https://doi.org/10.1109/PerComW.2012.6197540> (Published)

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Real-time trip information service for a large taxi fleet, by BALAN, Rajesh Krishna; KHOA, Nguyen Xuan; JIANG, Lingxiao. (2011.0). *MobiSys '11: Proceedings of the 9th International Conference on Mobile Systems, Applications and Services: Bethesda, MD, June 28 - July 1*, (pp. 99-112) New York: ACM. <https://doi.org/10.1145/1999995.2000006> (Published)

Configuring global software teams: A multi-company analysis of productivity, quality, and profits, by RAMASUBBU, Narayanasamy; CATALDO, Marcelo; BALAN, Rajesh Krishna; HERBSLEB, James. (2011.0). *ICSE 2011: Proceedings of the 2011 International Conference on Software Engineering: May 21-28, Waikiki, Honolulu*, (pp. 261-270) New York: ACM. <https://doi.org/10.1145/1985793.1985830> (Published)

PGTP: Power aware game transport protocol for multi-player mobile games, by ANAND, Bhojan; SEBASTIAN, Jeena; MING, Soh Yu; ANANDA, Akhihebbal L.; CHAN, Mun Choon; BALAN, Rajesh Krishna. (2011.0). *International Conference on Communications and Signal Processing ICCSP 2011: 10 - 12 February 2011, [Calicut], Kerala, India*, (pp. 399-404) Piscataway, NJ: IEEE. <https://doi.org/10.1109/ICCSP.2011.5739346> (Published)

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Evolution of a Bluetooth Test Application Product Line: A Case Study, by RAMASUBBU, Narayanasamy; BALAN, Rajesh Krishna. (2010.0). *Proceedings of the 18th ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE), November 7 - 11, 2010, Santa Fe, NM*, (pp. 107-116) New York: ACM. <http://dx.doi.org/10.1145/1882291.1882309> (Published)

Game action based power management for multiplayer online game, by ANAND, Bhojan; ANANDA, A. L.; CHAN, Mun Choon; LE, Long Thanh; BALAN, Rajesh Krishna. (2009.0). *MobiHeld '09: Proceedings of the 1st ACM Workshop on Networking, Systems, and Applications on Mobile Handhelds, Barcelona, Spain, August 17*, (pp. 55-60) New York: ACM. <https://doi.org/10.1145/1592606.1592619> (Published)

mFerio: The design and evaluation of a peer-to-peer mobile payment system, by BALAN, Rajesh Krishna; RAMASUBBU, Narayanasamy; PRAKOBPHOL, Komsit; CHRISTIN, Nicolas; HONG, Jason. (2009.0). *MobiSys '09: Proceedings of the 7th ACM International Conference on Mobile Systems, Applications and Services, June 22-25, Kraków, Poland*, (pp. 291-305) New York: ACM. <https://doi.org/10.1145/1555816.1555846> (Published)

The impact of process choice in high maturity environments: An empirical analysis, by RAMASUBBU, Narayanasamy; BALAN, Rajesh Krishna. (2009.0). *IEEE 31st International Conference on Software*

Engineering: ICSE 2009: 16-24 May, Vancouver, Canada: Proceedings, (pp. 529-539) Piscataway, NJ: IEEE. <https://doi.org/10.1109/ICSE.2009.5070551> (Published)

User guidance of resource-adaptive systems, by SOUSA, João Pedro; BALAN, Rajesh Krishna; POLADIAN, Vahe; GARLAN, David; SATYANARAYANAN, Mahadev. (2008.0). *Proceedings of the Third International Conference on Software and Data Technologies: Porto, Portugal, July 5-8, 2008*, (pp. 36-44) Porto, Portugal: INSTICC Press. <https://worldcat.org/isbn/9789898111524> (Published)

Towards Governance Schemes for Distributed Software, by RAMASUBBU, Narayanasamy; BALAN, Rajesh Krishna. (2008.0). *SDG '08: Proceedings of the 1st International Workshop on Software Development Governance: 2008, Leipzig, Germany, May 12-12, 2008*, (pp. 11-14) New York: ACM. <http://dx.doi.org/10.1145/1370720.1370725> (Published)

Globally Distributed Software Development Project Performance: An Empirical Analysis, by RAMASUBBU, Narayanasamy; BALAN, Rajesh Krishna. (2007.0). *ESEC/FSE 2007: The 6th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering: Dubrovnik, Croatia, September 3-7, 2007*, (pp. 125-134) New York: ACM. <http://dx.doi.org/10.1145/1287624.1287643> (Published)

Simplifying Cyber Foraging for Mobile Devices, by BALAN, Rajesh Krishna; Gergle, Darren; Satyanarayanan, Mahadev; Herbsleb, James. (2007.0). *MobiSys '07: Proceedings of the 5th International Conference on Mobile Systems, Applications and Services: San Juan, Puerto Rico, June 11-13, 2007*, (pp. 272-285) New York: ACM. <http://dx.doi.org/10.1145/1247660.1247692> (Published)

Matrix: Adaptive middleware for distributed multiplayer games, by BALAN, Rajesh Krishna; EBLING, Maria; CASTRO, Paul; MISRA, Archan. (2005.0). *Middleware 2005: ACM/IFIP/USENIX 6th International Middleware Conference, Grenoble, France, November 28 - December 2: Proceedings*, (pp. 390-400) Berlin: Springer. https://doi.org/10.1007/11587552_20 (Published)

Tactics-Based Remote Execution for Mobile Computing, by BALAN, Rajesh Krishna; SATAYANARAYANA, Mahadev; PARK, SoYoung; OKOSHI, Tadashi. (2003.0). *MobiSys '03: Proceedings of the 1st International Conference on Mobile Systems, Applications and Services: San Francisco, May 5-8, 2003*, (pp. 273-286) New York: ACM. <http://dx.doi.org/10.1145/1066116.1066125> (Published)

The Case for Cyber Foraging, by BALAN, Rajesh Krishna; Flinn, Jason; Satyanarayanan, Mahadev; Sinnamohideen, Shafeeq; YANG, Hen-I. (2002.0). *EW 10: Proceedings of the 10th Workshop on ACM SIGOPS European Workshop: Saint Emillion, France, July 1, 2002*, (pp. 87-92) New York: ACM. <http://dx.doi.org/10.1145/1066116.1066125> (Published)

TCP HACK: TCP Header Checksum Option to Improve Performance Over Lossy Links, by BALAN, Rajesh Krishna; LEE, Boon Peng; KUMAR, Renjish; Lillykutty, Jacob; Seah, Winston; Ananda, A. L.. (2001.0). *INFOCOM 2001: Proceedings of 20th Annual Joint Conference on Computer Communications, 22-26 April 2001, Anchorage, Alaska*, (pp. 309-318) Piscataway, NJ: IEEE. <http://dx.doi.org/10.1109/INFOCOM.2001.916713> (Published)

Conference Papers

WiWear: Wearable sensing via directional wifi energy harvesting, by TRAN, Vu H.; MISRA, Archan; XIONG, Jie; BALAN, Rajesh Krishna. (2019.0). *2019 IEEE International Conference on Pervasive Computing and Communications (PerCom), Kyoto, Japan, March 11-15, Kyoto*. <https://doi.org/10.1109/PERCOM.2019.8767406> (Published)

Moved by conflict: Exploring the relationship between experienced conflict and individual mobility patterns, by ZAKARIA, Nur Camellia Binte; GOH, Kenneth T.; LEE, Youngki; BALAN, Rajesh Krishna. (2018.0). *Interdisciplinary Network for Group Research, Baltimore, Maryland, US, 2018 July 19-21, Baltimore, Maryland, US*. (Presented)

Other Outputs and Contributions

Reports

Spatio-temporal efficiency in a taxi dispatch system by SANTANI, Darshan; BALAN, Rajesh Krishna;

WOODARD, C. Jason. (2008). (Published)

Dimorphic Computing by Lagar-Cavilla, H. Andreas; Tolia, Niraj; BALAN, Rajesh Krishna; De Lara, Eyal; Satyanarayanan, Mahadev; O'Halloran, David. (2006). <http://repository.cmu.edu/pdl/43/> (Published)

Giving Users the Steering Wheel for Guiding Resource-Adaptive Systems by SOUSA, Joao; BALAN, Rajesh Krishna; Poladian, Vahe; Garlan, David; Satyanarayanan, Mahadev. (2005). (Published)

Meeting the software engineering challenges of adaptive mobile applications by BALAN, Rajesh Krishna; SOUSA, Joao Pedro; SATYANARAYANAN, Mahadev. (2003). <https://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.13.728> (Published)

Research Grants

Singapore Management University

Food Recognition: Causality-driven Cross-modal Cross-lingual Domain Adaptation, Academic Research Fund (AcRF) Tier 2, Ministry of Education (MOE) , PI (Project Level): NGO Chong Wah , Co-PI (Project Level): Rajesh Krishna BALAN, 2023, S\$749,177

Quantum-Enhanced Modelling of Financial Time-Series Data for Rare Event Forecasting, QEP Call for Proposals, Quantum Engineering Programme (QEP) , Co-PI (Project Level): Paul Robert GRIFFIN, Rajesh Krishna BALAN, 2022, S\$1,372,272

Improving Fairness and Accessibility of Crowd Work, Academic Research Fund (AcRF) Tier 2, Ministry of Education (MOE) , PI (Project Level): HARA, Kotaro , Co-PI (Project Level): Rajesh Krishna BALAN, 2021, S\$579,384

Identifying Personas Using Video Analytics, Microsoft Research Asia Collaborative Research, Microsoft Research Asia , PI (Project Level): Rajesh Krishna BALAN, 2019

Building a Practical Location System for Tracking Consumer Movement in Indoor Public Spaces, Microsoft Research Asia , PI (Project Level): Rajesh Krishna BALAN, 2013, S\$26,000

Windows Phone 7 Location Detection Framework, Microsoft Research Asia , PI (Project Level): Rajesh Krishna BALAN, 2012, S\$15,120

LiveLabs Urban Lifestyle Innovation Platform, Digital Technology Development Scheme, Media Development Authority of Singapore (MDA) , PI (Programme Level): Rajesh Krishna BALAN , PI (Project Level): Archan MISRA, 2012, S\$9,994,000

Energy-Efficient Stream Analytics on Smartphones for Realtime Contextual Insight, Academic Research Fund (AcRF) Tier 2, Ministry of Education (MOE) , PI (Project Level): Archan MISRA , Co-PI (Project Level): Rajesh Krishna BALAN, 2011, S\$1,167,365

Power and Network-Aware Software Infrastructure for Multiplayer Mobile Games, Academic Research Fund (AcRF) Tier 2, Ministry of Education (MOE) , PI (Project Level): Rajesh Krishna BALAN, 2008, S\$1,168,000

Leveraging Mobile Sensing to Provide Early Detection of Meltdowns in Children with Autism, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Rajesh Krishna BALAN, 2023, S\$120,000

Transforming Competitive Swimming with Physiological & Smart Drone Based Sensing, Analysis and Coaching Insights, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Rajesh Krishna BALAN, 2023, S\$125,000

Designing a Data Governance Framework for Suspicious Behaviour Detection System, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): LIM How Khang , Co-PI (Project Level): Rajesh Krishna BALAN, 2022, S\$40,000

Personality in Real-Time Real-World Behaviour, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): William TOV, 2015, S\$25,580

User-Centric Mobile Authentication Mechanisms, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Rajesh Krishna BALAN, 2009, S\$9,408

Estimating Costs in Distributed Software Development and System Migration, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Narayan RAMASUBBU , Co-PI (Project Level): Rajesh Krishna BALAN, 2008, S\$14,650

Digital Wallet Creation, Testing, and Deployment, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Rajesh Krishna BALAN, 2007, S\$49,400

Other Institutions

Improving and monitoring the effectiveness of social distancing policies in institutes of higher learning, Central Gap Fund (COVID-19 Challenge), National Research Foundation PI (Project Level): Rajesh Krishna BALAN, 2020, SGD49,980

IndoorLoc Systems, SMU IIE Internal Innovation Grant, Ministry of Education PI (Project Level): Rajesh Krishna BALAN, 2019, SGD250,000

TEACHING

Courses Taught

Singapore Management University

Undergraduate Programmes :

- Foundations of Cyber-Physical Systems
- Interconnection of Cyber Physical Systems
- Internet of Things: Technology and Applications
- Software Project Management

Postgraduate Research Programmes :

- Empirical Research Project 1
- Empirical Research Project 2
- Empirical Research Project 3
- Empirical Research Project 4

THESES AND DISSERTATIONS

Theses and Dissertations Supervised

Singapore Management University

Supervisor, "Enabling Real-Time In-Situ Context-based Experimentation to Observe User Behaviour", Dissertation by KARTIK MURALIDHARAN, PhD in Information Systems, Singapore Management University, 2015

Theses and Dissertations Assessed

Singapore Management University

Committee Member, "Fusing Mobile, Wearable and Infrastructure Sensing for Daily Lifestyle Analytics", Dissertation by SOUGATA SEN, PhD in Information Systems, Singapore Management University, 2017

Committee Member, "A Dependency Graph Method for Analyzing Software Modifiability", Dissertation by KEVIN STEPPE, PhD in Information Systems, Singapore Management University, 2015

Other Institutions

Committee Member, "Large-scale Geo-referenced Sensing Using Personal Mobile Devices", Thesis by João Guilherme Pereira Rodrigues, Ph.D., University of Porto, 2019

Committee Member, "Sensing Flow Execution Engine for Concurrent Mobile Sensing Applications", Thesis by Younghyun Ju, Ph.D., KAIST, 2013

EXTERNAL SERVICE – PROFESSIONAL

Chairperson, UbiComp / Pervasive 10 Year Impact Award Committee, Association for Computing Machinery, 2020 - 2021

Chairperson, 1st Americas Student Symposium on Emerging Technologies (ASSET), Association for Computing Machinery, 2019

Workshop Chair, The 25th Annual International Conference on Mobile Computing and Networking (MobiCom), Association for Computing Machinery, 2019

Program Chair, The International Conference on Mobile Systems, Applications, and Services (MobiSys), Association of Computing Machinery (ACM), 2019

Program Chair, 11th International Conference on Communication Systems & Networks (COMSNETS), COMSNETS, 2019

Committee Member, UbiComp Steering Committee, Association for Computing Machinery, 2018 - 2022

Program Committee Chair, The 17th ACM International Conference on Mobile Systems, Applications, and Services (MobiSys), Association for Computing Machinery Special Interest Group on Mobile Computing (SIGMOBILE), 2018 - 2019

Program Committee Chair, 11th International Conference on Communication Systems & Networks (COMSNETS), COMSNETS Association, 2018 - 2019

Chairperson, 2nd Asian Students Symposium on Emerging Technologies (ASSET), ACM SIGMOBILE, 2018

General Chair, The ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp), ACM SIGMOBILE & ACM SIGCHI, 2018

Presenter Keynote Address, 8th Annual International Conference on Computer Science Education, Innovation and Technology (CSEIT), Global Science and Technology Forum (GSTF), 2017

Student Engagement Director, Executive Committee, Association for Computing Machinery Special Interest Group on Mobile Computing (SIGMOBILE), 2017 - 2022

Member, Test of Time Paper Award Committee, ACM SIGMOBILE, 2017

Workshop Chair, The 13th International Conference on emerging Networking EXperiments and Technologies (CoNEXT), ACM SIGCOMM, 2017

Program Chair, 4th Workshop on Physical Analytics (WPA), ACM SIGMOBILE, 2017

Presenter Keynote Address, 17TH IEEE International Conference on Mobile Data Management (MDM), IEEE COMSOC, 2016

Chairperson, 1st Asian Students Symposium on Emerging Technologies (ASSET), ACM SIGMOBILE, 2016

Poster & Demo Chair, 17th International Conference on Distributed Computing and Networking (ICDCN), ICDCN, 2016

Presenter Keynote Address, 2nd Workshop on Mobile Gaming (MobiGames), ACM SIGMOBILE, 2015

Poster & Demo Session Chair, The 13th ACM Conference on Embedded Networked Sensor Systems (SenSys), ACM SIGMOBILE, 2015

Workshop Chair, The 13th Annual International Conference on Mobile Systems, Applications and Services (MobiSys), ACM SIGMOBILE, 2015

Invited Lecture, 6th International Conference on Communication Systems and Networks (COMSNETS), COMSNETS, 2014

Program Chair, The ACM Multimedia Systems Conference Special Session on Mobile Multimedia Sensing (MMSys), ACM SIGMM, 2014

Program Chair, The Seventh International Conference on Mobile Computing and Ubiquitous Networking (ICMU), Information Processing Society Of Japan, 2014

Program Chair, 1st Workshop on Mobile Gaming (MobiGames), ACM SIGCOMM, 2012

Editor Journal Editor, IEEE Pervasive Computing Magazine Special Issue on Transportation Systems, IEEE Computer Society, 2012 - 2013

Program Chair, The Thirteenth Workshop on Mobile Computing Systems and Applications (HotMobile), ACM SIGMOBILE, 2012

Poster Session Chair, The 3rd Asia-Pacific Workshop on Systems (APSys), ACM SIGOPS and ACM SIGCOMM, 2012

Poster / Demo Session Chair, The Twelfth International Workshop on Mobile Computing Systems and Applications (HotMobile), ACM SIGMOBILE, 2011

Poster & Demo Chair, The 7th Annual International Conference on Mobile Systems, Applications, and Services (MobiSys), ACM SIGMOBILE, 2009

Doctoral Consortium Chair, The Tenth International Workshop on Mobile Computing Systems and Applications (HotMobile), ACM SIGMOBILE, 2009