

Assistant Professor Subrota Kumar Mondal

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Academic Qualification:

Ph.D. in Computer Science and Engineering, The Hong Kong University of Science and Technology (HKUST), Hong Kong, China

B.Sc. in Computer Science and Engineering, Khulna University of Engineering and Technology (KUET), Bangladesh

Teaching Area

Database Systems, Operating Systems, Software Engineering, Data Science.

Research Area

Cloud Computing, Networks and Distributed Systems, Automated Program Repair, Cyber Security, Performance and Dependability Evaluation.

Blockchain, Deep Learning, Natural Language Processing.

Working Experience

Sep 2018 - Present, Assistant Professor, Macau University of Science and Technology, Macao, China

Sep 2017 - Aug 2018, Postdoctoral Fellow, The Hong Kong Polytechnic University, Hong Kong, China

Dec 2016 - Aug 2017, Software Developer, iSunCloud Limited, Hong Kong, China

Sep 2015 - Nov 2016, Instructional Assistant, HKUST, Hong Kong, China

Sep 2011 - Aug 2015, Research Assistant and Teaching Assistant, HKUST, Hong Kong, China

Jun 2013 - Aug 2013, Summer Intern, Infosys Lab, India

Apr 2009 - Aug 2011, Lecturer, Pabna University of Science and Technology (PUST), Bangladesh

Jan 2008 - Mar 2009, Services Engineer, LM Ericsson Bangladesh Limited, Bangladesh

Academic Publication (selected)

Mondal, S. K., Pei, Y., Dai, H. N., Kabir, H M D., & Sahoo, J. P. (2020, Dec). Boosting UI Rendering in Android Applications. In 2020 IEEE International Conference on Software Quality, Reliability and Security (QRS)-Industry Track, IEEE.

Chang, N., Wang, L., Pei, Y., Mondal, S. K., & Li, X. (2018, July). Change-Based Test Script Maintenance for Android Apps. In 2018 IEEE International Conference on Software Quality, Reliability and Security (QRS) (pp. 215-225). IEEE.

Sabyasachi, A. S., Kabir, H. M. D., Abdelmoniem, A. M., & Mondal, S. K. (2017, September). A Resilient Auction Framework for Deadline-Aware Jobs in Cloud Spot Market. In Reliable Distributed Systems (SRDS), 2017 IEEE 36th Symposium on (pp. 247-249). IEEE.

Mondal, S.K., Sabyasachi, A. S., & Muppala, J. K. (2017, January). On Dependability, Cost and Security Trade-Off in Cloud Data Centers. In Dependable Computing (PRDC), 2017 IEEE 22nd Pacific Rim International Symposium on (pp. 11-19). IEEE, 2017

King-Hang Wang, Mondal, S.K., Ki Chan, and Xiaoheng Xie, A Review of Contemporary E-voting: Requirements, Technology, Systems and Usability, Data Science and Pattern Recognition, vol. 1(1), pp. 31-47, 2017.

Mondal, S.K.; Muppala, J. K.; Machida, F., Virtual Machine Replication on Achieving Energy-Efficiency in a Cloud, Electronics, 5(3), 37, 2016 (Impact Factor - 1.764).

Mondal, S.K.; Machida, F.; Muppala, J.K., Service Reliability Enhancement in Cloud by Checkpointing and Replication, In Principles of Performance and Reliability Modeling and Evaluation, pp.425-448. Springer International Publishing, 2016.

Mondal, S.K.; Abadhan S. S.; Muppala J. K., On Boosting Cloud Service Dependability through Optimized Checkpointing, 2016 International Conference On Cloud Computing And Big Data (CloudCom-Asia), The Hong Kong Polytechnic University, Hong Kong, 2016

Mondal, S.K.; Xiaoyan Yin; Muppala, J.K.; Alonso Lopez, J.; Trivedi, K.S., Defects per Million Computation in Service-Oriented Environments, IEEE Transactions on Services Computing, vol.8, no.1, pp.32-46, Jan.-Feb. 2015 (Impact Factor - 5.707)

Mondal, S.K.; Muppala, J.K.; Trivedi, K.S., Defects Per Million (DPM): A user-oriented perspective of telecommunication systems, Globecom Workshops (GC Wkshps), 2014 , vol., no., pp.711-716, 8-12 Dec. 2014

Mondal, S.K.; Muppala, J.K., Energy Modeling of Virtual Machine Replication Schemes with Checkpointing in Data Centers, Big Data and Cloud Computing (BdCloud), 2014 IEEE Fourth International Conference on , vol., no., pp.633-640, 3-5 Dec. 2014

Mondal, S.K.; Muppala, J.K.; Machida, F.; Trivedi, K.S., Computing Defects per Million in Cloud Caused by Virtual Machine Failures with Replication, Dependable Computing (PRDC), 2014 IEEE 20th Pacific Rim International Symposium on , vol., no., pp.161-168, 18-21 Nov. 2014

Mondal, S.K.; Muppala, J.K., Energy Modeling of Different Virtual Machine Replication Schemes in a Cloud Data Center, Internet of Things(iThings), 2014 IEEE International Conference on, and Green Computing and Communications (GreenCom), IEEE and Cyber, Physical and Social Computing(CPSCom), IEEE , vol., no., pp.486-493, 1-3 Sept. 2014

Mondal, S.K.; Muppala, J.K., Defects per Million (DPM) Evaluation for a Cloud Dealing with VM Failures Using Checkpointing, Dependable Systems and Networks (DSN), 2014 44th Annual IEEE/IFIP International Conference on , vol., no., pp.672-677, 23-26 June 2014

Professional Certification and Awards

Outstanding Performance Award in Online Teaching, Macau University of Science and Technology, Macao, 2020

Certified Kubernetes Administrator (CKA), Cloud Native Computing Foundation (CNCF), The Linux Foundation, 2020

Certified Kubernetes Application Developer (CKAD), Cloud Native Computing Foundation (CNCF), The Linux Foundation, 2020

Professional Society Membership

Member, Institute of Electrical and Electronics Engineers (IEEE)