Machine Learning and Data-driven Solutions for Cost-efficient Network Automation

Speaker: Sabidur Rahman

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Dr. Sabidur Rahman has recently completed his PhD in computer science from University of California Davis (2020). He received his MS and BS degree in computer science from the University of Texas at San Antonio (2014) and Bangladesh University of Engineering and Technology (2011), respectively. Dr. Sabidur is currently a tenure-track assistant professor at the department of computer science, Sonoma State University, CA, USA. He also has industry research and development experience with ATT Labs, Epic Systems, and Samsung RD. His research interests include cost-efficient network automation, computer network virtualization, use of machine learning, and data-driven solutions to solve practical problems. His research has been published in flagship IEEE conferences (IEEE ICC, IEEE Globecom,

IEEE CloudNet, etc.) and high-impact IEEE Transactions (TNSM, TGCN, etc.). His research has gained invitation for talks at prestigious venues, including Lawrence Berkeley National Laboratory, USA; University of California Berkeley, USA; 8th Big Data Finance 2020 (Cornell Engineering); Asia Communications and Photonics Conference 2020; etc. He has also served as reviewer of IEEE/ACM Transactions on Networking; Elsevier Computer Networks Journal; IEEE Communications Surveys Tutorials; IEEE Transactions on Services Computing, Springer Journal of Grid Computing; IEEE/OSA Journal of Optical Communications and Networking; IEEE Intl. Conference on Cloud Networking; etc. More details can be found at http://www.linkedin.com/in/kmsabidurrahman/and https://scholar.google.com/citations?user=sk7J-OwAAAAJ&hl=en.

Abstract

Machine Learning (ML) and data-driven solutions have revolutionized many areas of technologies. Communication technology is also increasingly benefiting from such solutions. Automated network resource management powered by ML and data-driven solutions can help to reduce the cost of connectivity, to free up more bandwidths, to foster innovation on the connected services etc., leading to more connected society and businesses. Many time-consuming and complex tasks of network resource management are being automated; thanks to virtualization of network components, advancements in artificial intelligence, and insights learned from data. Dr. Sabidur's research works with Networks Research Labs at UC Davis and ATT Labs explore important problems in this area of research. This is an exciting new area of research with potential impact on Edge Computing, IoT, Machine Intelligence, Industry 4.0, Smart City, 6G and beyond. Dr. Sabidur is always interested in research collaborations with faculties, researchers, graduate, and undergraduate students.

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Where: Online. Zoom Meeting ID: 696 8035 7532, Password: 181125

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