

EDUCATION

PhD in Electrical and Computer Engineering

[Exp. 2021]

Department of Electrical and Computer Engineering (ECE)
Kansas State University (K-State), Manhattan, KS
CGPA: 3.90/4.00

BS in Electrical and Electronic Engineering

[Feb 2013]

Department of Electrical and Electronic Engineering (EEE)
Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh
CGPA: 3.61/4.00

PROFESSIONAL EXPERIENCE

Graduate Research Assistant at Kansas State University (K-State)

[Aug 2016 - Present]

- Developed feature selection methods for time series prediction of dengue fever using recurrent neural networks.
- Developed epidemic models along with graph mining algorithms to simulate the spreading processes of infectious diseases (Zika, African swine fever) in complex networks. (Scientific Reports, PLoS ONE)
- Designed a blockchain based data management system for application in the US cattle industry. (IEEE Access)

Senior Software Engineer at Samsung R&D Institute Bangladesh (SRBD)

[Apr 2013 - Jul 2016]

- Managed the Connectivity, Security and Protocol team of the IoTivity QA project as a Team Lead in 2016.
- Extended the Californium (Java implementation of CoAP) framework with features of IoTivity protocol and developed a conformance testing tool to evaluate the native IoTivity implementation.
- Developed test frameworks for unit and integration testing of the Connectivity Abstraction (CA) layer of the IoTivity frameworks in Linux, Tizen and Arduino platforms.
- Designed, implemented, and maintained a TURN (RFC 5766) based NAT traversal solution that can establish TCP connections using multiple relay servers. (worked at Samsung Electronics, Suwon, South Korea, 2014)

Research Engineer at Institute of Information and Communication Technology (IICT)

[Feb 2013 - Mar 2013]

- Conducted workshops on embedded systems as a teaching assistant on FPGA, and Microcontrollers.

ACADEMIC EXPERIENCE

Relevant Courses	Machine Learning and Pattern Recognition, Network Theory, Mathematics of Data and Networks, Analysis of Algorithms, Agent-Based Game Theory
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Teaching Responsibilities (TA)	Introduction to Blockchain (Co-Taught), Applied Scientific Computing, Introduction to Computer Engineering, Linear Systems
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TECHNICAL SKILLS

Programming Languages	C, C++, Python, MATLAB, R, JavaScript, Java, Solidity, SQL
Platforms	Linux, Windows, Arduino, AVR, Tizen
Protocols/Frameworks	TensorFlow, Keras, Numpy, Pandas, PostGIS, Ethereum, Node.js, CoAP
Tools	Jupyter, Wireshark, Jira, Git, gtest, Robot framework

AWARDS & HONORS

- Grade 1 (90th percentile) in annual performance evaluation of 2014 and 1st rank in Software Capability Test of 2013 in the Solution Lab of Samsung R&D Institute Bangladesh.
- University Deans List Award at BUET (2009-10). Scholarships from the Cisco Networking Academy Program, CSE, BUET (2010 –11) with a score of 95.75% (rank 1/84) in the CCNA Exploration course.

ACTIVITIES & LEADERSHIP

- Alumnus of the Leadership Development Program at the Staley School of Leadership Studies, K-State.
- Founder and the 1st president of Bangladeshi Students' Association at K-State. Volunteered for the American Red Cross Club at K-State.