Zareen Choudhury

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Education

Massachusetts Institute of Technology, Cambridge, MA
Master of Engineering in Electrical Engineering & Computer Science   June 2019
- GPA: 5.0/5.0, Computer Systems Concentration (Courses: Networking, Distributed Sys., Operating Sys.)
- Master's Thesis research completed in Networks at MIT group under Prof. Dina Katabi

Bachelor of Science in Electrical Engineering & Computer Science   June 2018
- GPA: 4.8/5.0, IEEE Eta Kappa Nu Honors Society, Angle Research & Innovation Scholar, Teaching Assistant
- Courses: Machine Learning, Computer Vision, Linear Algebra, Probability & Stats, Microcontrollers, Digital Systems, Circuits, Computation Structures, Software Design, Algorithms

Skills

- Distributed sys., operating sys., networking, backend infra., FPGA/microcontrollers, web/mobile app dev.
- Programming languages: Python, Java, C, Golang, Scala, Verilog, Objective-C, C#, Lua

Projects

Smart Window, Microcontrollers Lab Final Project   April 2017-May 2017
- Built a window with manual & automatic transparency control using PSoC microcontroller

La PC-na, Digital Systems Lab Final Project   Oct 2016-Dec 2016
- Built an interactive pool table that combined virtual and physical gameplay using an FPGA

iSight, Assistive Technology Class Project, *Computer Vision Software Developer*   Sep 2015-Dec 2015
- Used OpenCV to develop an Android app that enables blind individuals to interact with touchscreens

Research & Work Experience

Networks at MIT Group - MIT CSAIL, *Master's Thesis*   August 2018-June 2019
- Developed system for configuring Wi-Fi connectivity & spatial boundaries for health-monitoring IoT device
- Successfully tested and deployed configuration system in 10-12 homes/hospitals

Distributed Robotics Lab - MIT CSAIL, *SuperUROP Scholar*   September 2017-May 2018
- Improved performance and usability of Canopy, a cloud platform for distributed robotics applications
- Platform used by multi-car localization and robotic teleoperation projects within the lab

Yelp, *Distributed Systems Intern*   May 2017-August 2017
- Implemented system to support custom policies for internal request routing & load balancing
- Enabled developers to visualize real-time request routes and bottlenecks in internal services

Dexcom, *Server Development Intern*   June 2016-August 2016
- Developed real-time processing pipeline to handle data from continuous glucose monitoring (CGM) device
- Modernized backend stack using Scala, Kafka & Spark (data streaming & analysis), Cassandra (database)

Facebook, *iOS Development Intern*   June 2015-August 2015
- Developed real-time multi-player iOS word game in Objective-C as part of Facebook University program
- Implemented backend using Parse as database and Firebase for real-time notifications

NASA Goddard Space Flight Center, *Software Development Intern*   January 2015
- Implemented GUI features and automated creation of new ground commands in Core Flight Software

Activities

Teaching Assistant, IEEE/HKN, TechX/HackMIT, Gordon Eng. Leadership Program, Society of Women Eng.