Rajat Mehndiratta

GITHUB rajatscode **LINKEDIN** /in/rajatsprofile **WEBSITE** rajats.site **E-MAIL** r@jats.email **LATEST RESUME** rajatsresu.me

Skills

Languages: Python, Java, C, JavaScript, MATLAB, SystemVerilog, HTML, CSS, Swift, Hack, bash, VimL
Libraries: React Native, Vue, Angular, Redux, Bootstrap, Bulma, Flask, TensorFlow, Keras, Sonnet, Guava
Tools: git, hg, p4, CI/CD, Agile workflow, Amazon Web Services, Google Cloud Platform, Azure, LaTeX
Natural Languages: English (fluent), Hindi (native), Spanish (conversational)

Experience

Software Engineer (Backend, Java) June 2019 - present
Unified Fulfillment Optimization, Google

Solving compute, network, and storage planning challenges at Google scale. Working on later-stage planning logic, implemented and landed automated workflows to detect and handle no-longer-viable solutions, increasing touchlessness. Designed and delivered components of look-ahead logic for planning with counterfactuals to increase on-time fulfillment and reduce need for manual intervention.

Software Development Engineer Intern (Backend, Python) May - August 2018
Topline Forecasting (Supply Chain Optimization Technologies), Amazon.com

Investigated, proposed, and implemented serverless AWS solutions to reduce compute costs of forecasting team by 10x-100x. Based on engineers' and economists' large-scale workflow requirements, developed definition schemas, built workflow runners, and generated over 150 pages of documentation.

Software Development Engineer Intern (Machine Learning, Python) May - August 2017
Robotics (Worldwide Operations), Amazon.com

Explored and validated deep reinforcement learning approaches for visual navigation in the context of sidewalk delivery (Amazon Scout). Drove data-gathering, simulation, and performance metrics efforts.

Education

Carnegie Mellon University May 2019
Bachelor of Science, Electrical and Computer Engineering

Coursework: Advanced Mobile Robot Development (16-865), Advanced Digital Signal Processing (18-792), Introduction to Machine Learning (10-601), Rapid Protoyping of Computer Systems (18-540), Introduction to Computer Architecture (18-447), Natural Language Processing (11-411), Neural Technology: Sensing & Stimulation (18-412), Logic Design and Verification (18-341), Entrepreneurship for Engineers (70-420), Business Law (70-364), Organizational Behavior (70-311)

Involvements: hackathons (competitor, mentor, organizer, and sponsor), Mock Trial (Captain), SDC Buggy (carbon-fiber gravity racing; Mechanic), End The Rain (umbrella dispensers; Co-Founder, Tech Lead)

Projects

Nemosi (18-540 Class Capstone) January - May 2019
Chief Architect, Wireless Networking Lead

Drove architecture design, explored wireless networking options, and worked with designers, engineers, and scientists to prototype technological solutions to increase independence of Alzheimer's patients.

SCOT-T Lunar Rover (16-865 / CMU+Astrobotic Lunar X Prize Rover) January - May 2016
Engineer on Communications, Hardware, and UI Teams

Worked on development and testing of UDP-based communications system for 4.5kg Cube Rover standard; formalized and documented sensor architecture; revised interface design and usability guidelines.

SpitBars (Kent Hack Enough 2015 First Place) October 9-11, 2015
Hackathon Competitor

Built algorithmic analysis for freestyle rap using natural language processing in order to create game where two players could compete in rap battles and visualize their rhythm and flow.

FifthSense (PennApps Fall 2015 Grand Prize) September 6-8, 2015
Hackathon Competitor

Devised and built handheld bidirectional input/output device to allow severely visually-impaired people to use smartphones and portable smart devices conveniently and efficiently within highly mobile contexts.