

# 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/Octave, SystemVerilog, HTML, CSS, bash, VimL Tools: git/hg/p4, Amazon Web Services (serverless), TensorFlow, React Native, Bootstrap, L <sup>A</sup> T <sub>E</sub> X Natural Languages: English (fluent), Hindi (native), Spanish (conversational)
Experience	<div><div><b>Software Engineer (Backend, Java)</b> June 2019 - present</div><div>Unified Fulfillment Optimization, Google</div><div>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.</div></div> <div><div><b>Software Development Engineer Intern (Backend, Python)</b> May - August 2018</div><div>Topline Forecasting (Supply Chain Optimization Technologies), Amazon.com</div><div>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.</div></div> <div><div><b>Software Development Engineer Intern (Machine Learning, Python)</b> May - August 2017</div><div>Robotics (Worldwide Operations), Amazon.com</div><div>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.</div></div>
Education	<div><div><b>Carnegie Mellon University</b> May 2019</div><div>Bachelor of Science, Electrical and Computer Engineering</div><div>Coursework: Advanced Mobile Robot Development (16-865), Advanced Digital Signal Processing (18-792), Introduction to Machine Learning (10-601), Rapid Prototyping of Computer Systems (18-540), Introduction to Computer Architecture (18-447), Natural Language Processing (11-411), Neural Technology: Sensing &amp; Stimulation (18-412), Logic Design and Verification (18-341), Entrepreneurship for Engineers (70-420), Business Law (70-364), Organizational Behavior (70-311)</div><div>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)</div></div>
Projects	<div><div><b>Nemosi (18-540 Class Capstone)</b> January - May 2019</div><div>Chief Architect, Wireless Networking Lead</div><div>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.</div></div> <div><div><b>SCOT-T Lunar Rover (16-865 / CMU+Astrobotic Lunar X Prize Rover)</b> January - May 2016</div><div>Engineer on Communications, Hardware, and UI Teams</div><div>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.</div></div> <div><div><b>SpitBars (Kent Hack Enough 2015 First Place)</b> October 9-11, 2015</div><div>Hackathon Competitor</div><div>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.</div></div> <div><div><b>FifthSense (PennApps Fall 2015 Grand Prize)</b> September 6-8, 2015</div><div>Hackathon Competitor</div><div>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.</div></div>