

Rajat Mehndiratta

GITHUB [rajatscode](#) LINKEDIN [/in/rajatsprofile](#) WEBSITE [rajats.site](#) E-MAIL [r@jats.email](#) LATEST RESUME [rajatsresu.me](#)

Skills

Languages: Python, Go, Java
Frameworks: gRPC, Flask, React, Bulma
Tools: bash, vim, git, Mongo, L^AT_EX

Experience

Software Engineer

August 2021 - February 2023

Plaid > Internal Platform > Core Services > Abstractions

Prioritized correctness, reliability, and velocity in data modeling and storage for core systems in Go.
+ Owned project to resolve scaling limit, extending company storage runway from 2022Q1 to late 2020's.
+ Designed and built verification to help detect and manage 100MM's of obsolete user connections.
+ Led component efforts for infrastructure cost reduction (\$45k/mo) and incident response speedup.

Software Engineer

June 2019 - July 2021

Google > Tech Infra > Unified Fulfillment Optimization > Fleet Transformation

Enhanced Java backend for mixed-integer programming solver microservice to plan datacenters, focused on reducing lead time variance and increasing planning granularity and touchless automation.
+ Launched recurring automated jobs to detect and re-plan no-longer-viable solutions.
+ Designed and delivered API to plan with counterfactuals, increasing on-time fulfillment and reducing need for manual intervention for planning-time changes and execution-time obstacles.

Software Development Engineer Intern

May - August 2018

Amazon > Supply Chain Optimization Technologies > Topline Forecasting

Investigated and implemented serverless solutions to reduce forecasting compute costs by 10-100x.
+ Designed and implemented Python workflow orchestrator to operate serverless forecasting on AWS.
+ Generated 150+ pages of documentation covering several viable serverless architecture options.

Software Development Engineer Intern

May - August 2017

Amazon > Worldwide Operations > Robotics

Validated deep reinforcement learning for visual navigation in sidewalk delivery (Amazon Scout).
+ Drove effort to generate training data from realistic commercial virtual 3D environments.
+ Built simulation and testing environment for Nav A3C visual navigation agent.

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 Prototyping 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)

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 and wireless networking design for prototype system to help Alzheimer's patients.

SCOT-T Lunar Rover (16-865 / CMU+Astrobotic Lunar X Prize Project)

January - May 2016

Engineer on Communications, Hardware, and UI Teams

Worked on development and testing of UDP-based communications for novel 4.5kg Cube Rover standard.

FifthSense (PennApps Fall 2015 Grand Prize)

September 6-8, 2015

Hackathon Competitor

Built full-duplex handheld device to allow blind users to access smartphones in mobile contexts.