

Adam M. Rahman

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EDUCATION

Wesleyan University

Sept. 2016 – May 2019

B.A. Computer Science, Theater; GPA: 3.36/4.0

Graduated May 2019; Patricelli Center Fellow; Deans' List Spring 2017

Relevant Coursework: Algorithms & Complexity, Computer Networks, Design of Programming Languages, Randomized Algorithms, Proseminar in Audiovisual Machine Learning, Patricelli Center Fellowship

Stuyvesant High School

Sept. 2012 – June 2016

High School Diploma

Graduated June 2016; Arista National Honor Society; Varsity Lincoln-Douglas Debate

EXPERIENCE

IBM

July 2020 – Present

Staff Software Developer

- Develops, executes, and maintains continuous integration and regression tests for IBM Z mainframe software components, including Docker containers running via IBM z/OS Container Extensions (zCX), IBM zCX Foundation for Red Hat OpenShift, and z/OS Management Facility RESTful APIs
- Orchestrates test automation infrastructure with Ansible and Jenkins to execute and monitor health checks, load/stress tests, and customer workloads across a series of on-premise mainframe test hardware and IBM Wazi as a Service Virtual Machines on IBM Cloud
- Develops and ports test utilities with Metal C, z/OS High Level Assembler, and Golang to exploit and test z/OS services and run open-source tools such as Grafana k6 and Locust natively
- Conducts daily monitoring and maintenance of mainframe test systems, including mounting filesystems, installing products such as Conda, Node.js, and Z Open Automation Utilities, and troubleshooting system dumps and traces in coordination with other developers and testers

Buildly

Sept. 2019 – Nov. 2019

Software Development Intern

- Worked in a remote team to implement bugfixes, write unit tests, and refactor features for Buildly's Django backend in order to connect multiple microservices to a single endpoint, manage several databases, and incorporate self-documenting API specifications with Swagger UI
- Maintained end-to-end test suite for Buildly's frontend and backend with the Robot framework
- Communicated with CEO and CTO daily about product roadmap and development guidelines

Kite.com

Sept. 2019 – Dec. 2019

Python Code Curator

- Composed over 30 code samples with accompanying tutorials in Markdown, adhering to Python best practices, to answer the most frequently asked programming questions
- Coordinated remotely with teammates across the U.S. to review and verify code samples

UNICEF

Dec. 2018 – Feb. 2019

Software Development Intern

- Implemented pipelines to retrieve road networks per country and compute distances between school and health facility coordinates extracted from large geospatial datasets
- Optimized algorithm performance to improve computation speed by hundreds of times across thousands of geospatial points by researching and incorporating fast Python libraries
- Demoed solution to team members and published [road retrieval code](#) to UNICEF's official GitHub
- Provisioned a [Docker image](#) bundled with pipeline code and requisite libraries intended for use by Magicbox developers and data scientists

Kurani Architecture

June 2018 – August 2018

Software Development Intern

- Integrated Raspberry Pi sensor data and scraped content from TedEd and Khan Academy to prototype 'Aristotle', a responsive learning feed for classrooms and smart devices
- Collaborated with CEO to brainstorm IoT implementation in learning spaces

Wesleyan Local Food Co-Op

Sept. 2017 – Feb. 2019

Volunteer Programmer

- Implemented web and command-line utilities for Wesleyan's Local Food Cooperative, a student-run group that brings sustainable locally sourced food to the Wesleyan community
- Retrieved Qualtrics survey data, computed share prices for participants, and outputted spreadsheets for co-op coordinators to determine total shares and money owed per-person

PROJECTS

AskStreets: Analyzing Street Networks With AI

March 2025

ArangoDB, NetworkX, LangGraph | github.com/msradam/askstreets

- Developed an agentic AI app to parse natural language user queries, process graph structures built from OpenStreetMap, and execute graph algorithms to generate and visualize insights into street networks
- Second Place Winner of ArangoDB and Nvidia's "Building the Next-Gen Agentic App with GraphRAG & NVIDIA cuGraph" Hackathon, March 2025

HeatTweets: Geocoding Fire Incidents in NYC

March 2020

R, Python, KeplerGl | github.com/msradam/NYCFireData

- Worked in a team to scrape, geocode, and map fire incidents from Twitter using R, Python, and KeplerGl
- Presented at NYC's Open Data Week Hackathon: "Can Data Start a Movement?" at Queens College, NY

Carceral Contagion: Incarceration Simulation

August 2019

Mesa, NetworkX, Python | github.com/msradam/carceral-contagion

- Simulated an epidemiological model of U.S. mass incarceration based on historical data, illustrating racial disparities and the infectious nature of imprisonment
- Modelled the population network with NetworkX graph data structures and implemented an interactive frontend with the Mesa agent-based simulation library
- Project prototype earned Social Good Award + 2nd Place Crowd Favorite at Wellesley Hacks, Nov. 2017

Geospatial Routing API

July 2019

Scikit-learn, Django, Docker, OpenAPI | github.com/msradam/geospatial-routing-api

- Expanded upon my UNICEF internship project by implementing a microservice with API endpoints to compute straight-line and routed distances between geographic coordinates and retrieve roads as graph data structures, with a Django backend and Swagger UI to view endpoint documentation

RESP: Responsive Emotional Support Protocols

June 2019

Node.js, Express, React, MongoDB | github.com/msradam/resp

- Worked in a team of software developers and UX designers to implement a React app with Typeform webhooks to check-in natural disaster survivors, store them in a MongoDB database, and query the open-source Healthsites.io API for nearby medical facilities
- Winner of the IBM Call for Code Challenge at AngelHack Manhattan, June 2019

TECHNICAL SKILLS

LANGUAGES	Python, JavaScript (ES6+), Java, C, Bash, Markup: HTML5, CSS3, Markdown
CONCEPTS	RESTful API Design/Integration, MVC Architecture, Agile
FRAMEWORKS	Docker, Kubernetes, Django, Flask, Express, React, Robot
TOOLS	Git, GitHub, Jenkins, IBM Cloud, Ansible, Locust, Grafana k6
DATA	PostgreSQL, GraphQL, MongoDB, IBM Db2
TESTING	Unit, Integration, Regression, End-to-End, Load/Stress