

# Jason Yang

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## Education

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### Duke University

Expected May 2024

B.S in Computer Science, (GPA: 3.66/4.0)

**Courses:** Data Structures & Algorithms, Computer Architecture, Operating Systems, Database Systems, Advanced Algorithms, Probability Theory, Regression Analysis

## Technical Skills

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Languages: Java, C/C++, JavaScript, Python, HTML/CSS, SQL, R

Technologies: Git, React.js, Django REST, Docker, AWS, Bash, Unix, Vim, Agile (Scrum)

## Professional Experience

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### Amazon

Seattle, WA

Software Development Engineer Intern – Alexa Smart Energy Team

May 2022 – Aug 2022

- Worked on Alexa Smart Energy, a team focused on account-linking flows and APIs that enable 3p-integration incentivizing enrollment in energy rebate programs for Amazon Smart Home Devices.
- Architected and implemented an automated ASIN Ingestion service to onboard thousands of new rebates offers, decreasing required manual data-parsing and email overhead by 62%.
- Leveraged AWS Lambda, ECS, and Step Functions to scale ingestion service and DynamoDB pipeline durability by 21%. Utilized AWS CloudWatch metrics and alarms to monitor pipeline traffic. Built a new feature that pings on-call worker when new rebate programs are discovered in XML data feeds.

### Technify

San Diego, CA

Software Engineer Intern – BridgeOut Team

June 2021 – Aug 2021

- Developed a full stack web application through Django where users create and manage crowdfunding campaigns with user-authentication features for subsidiary BridgeOut NGO project.
- Helped create a Django RESTful API microservice able to service thousands of potential users.
- Communicated with team members and BridgeOut partners and leveraged business resources to finalize production-ready solution.

### HackDuke

Durham, NC

Sponsorship Team Lead

Feb 2021 - Present

- One of the Sponsorship Team Leads for the HackDuke Hackathon Planning Committee.
- Reached out to 50+ companies to secure 35k+ in sponsorship and collaborated with 30 teammates to coordinate team events and logistics for the 2021 and 2022 annual *Code For Good* events.

## Technical Projects

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### Thread Library

- Implemented fully functional thread-library in C++ with common thread functions such as thread lock, unlock, wait, signal, and broadcast capable of simulating multi-threaded programs.
- Incorporated automatic deadlock detection/prevention.

### Pathfinding Visualizer

- Developed a React application that visualizes famous pathfinding algorithms.
- Implemented Dijkstra's Algorithm, A\* Search, DFS/BFS, and a Recursive Maze Generation Algorithm.

### Food Calorie Tracker

- Created a full-stack web application using Flask framework to track daily caloric intake.
- Modeled frontend after popular fitness apps such as MyFitnessPal. Built backend with Python and integrated SQLite database to store user input.