Mohnish Aggarwal

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EDUCATION University of Michigan

College of Engineering

Bachelor of Science in Computer Science

• Graduation: April 2023

• Cumulative GPA: 3.81/4.0

SKILLS

Reactjs, Next.js, Node.js, Tailwind CSS, Typescript, C++, SQL, API Development, AWS services, Python, Jest, Sinon, Cypress

EXPERIENCE

Amazon

May – Aug 2022

Software Developer Engineer Intern

Detroit, MI

Ann Arbor, MI

- Configured a serverless infrastructure as code solution, using SNS Topic, SQS queue, Lambda functions, DynamoDB, and API Gateway, to help Amazonians file their taxes.
- Designed unit and integration tests for backend services and frontend services using Cypress, Sinon, and Enzyme.
- Learned and implemented Amazon's security best practices for infrastructure components including encryption with KMS keys, housing components in a VPC, and implementing the principle of least privilege across every AWS resource with IAM authorization.
- Completed every deliverable, intended to be done by internship's end, by the midpoint check-in and completed five stretch goals by internship's end.

Blankly Finance

Ann Arbor, MI

Dec 2021 - Aug 2022 Founding Engineer

- Pioneered a modern algorithmic trading platform that secured 1.5 million dollars of funding from Contrary Capital and is used by over 1000 users to build, back test, and deploy trading algorithms.
- Engineered a full stack usage-based billing service, primarily using Stripe, Reactjs, Nodejs, Cloud Run, Cloud Scheduler, and Cloud Functions, to allow customers to manage their subscriptions, payment methods, and invoices while collecting monthly revenue based on customers' subscription plans and cloud usage.
- Developed a data caching system to store terabytes of historical cryptocurrency data from multiple exchanges with PostgreSQL, decreasing data query times and increasing data throughput by over a factor of 100x.

FitFluence

Ann Arbor, MI

June – Oct 2021

Full Stack Developer

- Developed a fitness social media mobile application, with React Native and Firebase, to allow users to share their daily fitness routines and lifestyles.
- Practiced Agile methodology on a team practicing the Scrum framework to ensure project timeliness and track progress.

CLUBS

Michigan Investment Group

Ann Arbor, MI

June 2022 – Feb 2023 President

 Managed five quantitative algorithm teams through guiding overall feature timelines, tracking sprints with project leads, and leading weekly club meetings.

Dec 2021 - April 2022 VP of Operations

 Led club operations including managing resources, scheduling events, and recruiting talented students to join the Quant Winter 2022 roster.

Sept 2021 – Jan 2022

 Developed Cloud Functions to update predicted returns and average estimates kept for equities in a Firestore database upon writes or updates by platform members.

Jan - May 2021

Risk Management Team

 Engineered a Python application to calculate optimal weights for a portfolio according to modern portfolio theory that maximized expected returns while minimizing risk.