

Pranav Shukla

+1(248)-403-0495 | pranavshuklajobs@gmail.com | [linkedin.com/in/pranavshhh/](https://www.linkedin.com/in/pranavshhh/) | github.com/FireTeamSix

Education

Michigan State University

Bachelor of Science in Computer Science

East Lansing, MI

Sep. 2020 – Dec. 2024

Technical Skills

Computer Languages: C++/C, Python, JavaScript/TypeScript, AARCH64, SQL, YAML, HTML/CSS

Technologies: AWS, React, Django, PostgreSQL, Docker, Kubernetes, Tensorflow, Pandas, LINUX, Postman

Experience

Software Engineering Intern

The Vanguard Group

May 2023 – Aug. 2023

Malvern, PA

- Engineered DSCR calculations in **TypeScript** to reduce client computing time, boosting trade performance by 5%
- Implemented bond trading heatmap using **D3** React library to modernize an interface and ease stress on traders
- Built a **React** hook to fetch and parse data from **S3 buckets**, boosting loading speeds by 25%.

Software Engineering Intern

The Vanguard Group

May 2022 – Dec. 2022

Malvern, PA

- Developed cloud infrastructure with **SpringBoot** to connect traders to data suppliers, saving >\$100,000 / month
- Programmed **AWS Lambda** hosted FaaS with **Python's boto3** library to find and delete data from **Glue** databases
- Configured 30 **Atlassian Bamboo** builds with **YAML**, routing storage manipulation services to proper AWS servers

Research Assistant

Intelligent Data Analytics (ILLIDAN) Lab

Sep. 2021 – Mar. 2022

East Lansing, MI

- Realistically simulated a limit order book with more than 12,000 buys and sells to train a **TensorFlow** model
- Revamped a **Spatial Neural Network** by integrating **long short-term memory** modules to analyze limit order books, growing simulated trade volumes by 13%

Technician

Michigan State University ComArtSci

Nov. 2021 – May 2022

East Lansing, MI

- Ran technical operations and helped over 350 staff and students with technical problems
- Collaborated with staff to fix 5 network outages and provide support when faculty and students were effected
- Set up WiFi wiring throughout ComArtSci building, giving more than 3,500 people secure access to the internet

Business Analyst Intern

Chime Menu, RecTable LLC.

May 2020 – Aug. 2020

Ann Arbor, MI

- Architected and implemented new strategy for customer onboarding, decreasing client training times by 50%
- Developed onboarding policies for mastery of software and effortless implementation into existing POS systems
- Increased sales 75% by presenting competitive analysis decks to chief officers and changing product strategy

Projects

AirFleet | Python, Django, JavaScript, React, PostgreSQL, AWS, aviationstack API

July 2021 – September 2022

- Developed Pilot Logbook web app that allows users to login to accounts and add entries to their logbooks, including entries such as trip photos and route-waypoint storage
- Created and connected a **PostgreSQL** database that stores all data, and is maintained on **AWS Lightsail**
- Implemented RESTful architecture with **Django** for entry, updating, and deletion of logbook data by users
- Connected **Django** to a **React** frontend to provide a smooth user experience

Stock Correlator | Python, BeautifulSoup4, SciKit-Learn, pandas, Yahoo! Stocks API

May 2020 – June 2021

- Scraped S&P 500 stock tickers on Wikipedia using **Python's BeautifulSoup4** library
- Used **Yahoo! Stocks API** to pull all OHLC data since 2000 into a **pandas** dataframe
- Algorithmically calculated R value of Adjusted Closes between companies using **SciKit-Learn**
- Creates 500 x 500 **matplotlib heatmap**, including color-coding for positive and negative correlations