Abhishek N Mishra

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EDUCATION

New York University | New York, NY
Masters in Computer Science | Sep 2021 - May 2023

Manipal Institute of Technology | Karnataka, India
Bachelor of Technology in Computer Science | Aug 2016 - May 2020

EXPERIENCE

Software Engineer | FlexTrade Systems| Great Neck, NY | Sep 2023 – Present
- Leveraging and improving gRPC API performance , utilizing Python, C# and Golang endpoints to write high latency trade queries and creating reports according to client requirements.
- Developing End of Day Trade, Security Master reports in Scala, XML for different Hedge funds reporting to Prime Brokers, Fund Administrators covering various products like Equities, Interest Rate Swaps, FX Securities
- Creating and improving features for flagship trading Order Management System (OMS), writing server configurations in Linux, interacting with MySQL backend, and running Jenkins builds, for new and existing client implementations

Software Engineer Intern | Tesla | Palo Alto, CA | Feb 2023 – May 2023
- Engineered a full stack application in **React, Express, and MySQL** displaying scalable visualizations in LightningCharts.js showing 1-5 million data points sourced from multiple test runs on Dynamometers
- Developed Middleware API Service in **Golang, MongoDB** boosting performance and concurrency of internal dashboard
- Integrated Client-side callbacks in **Plotly Dash** improving latency of dashboard used by team of 50+ engineers

Data Visualization Intern | Humatics | Waltham, MA | Jun 2022 – Aug 2022
- Developed dashboard application in **Python** and **StreamLit** analyzing and aggregating data collected from various sensors on a real-world train run
- The dashboard diagnosed problematic areas on railway tracks using visualizations in **Plotly** for the Sensor Fusion Algorithms team, improving on existing non-interactive tools
- Leveraged **GitHub Actions** Hosted Runners to create workflows that made the dashboard cross-platform, available as a standalone executable application, and automated releases
- Designed interactive time series plots and animations by building on top of existing tools utilizing **Robot Operating System** (ROS**)** and **Python**

Software Engineer | Oracle Cerner | Bangalore, India | Jan 2020 – Aug 2021
- Developed and delivered 30+ Medical Device Interfaces (MDI) in **Java** that facilitated patient/test data flow, along with unit testing in frameworks like **JUnit, Mockito**
- Spearheaded project on legacy workflow migration to Object Oriented codebase in **Java, Maven,** and **Docker** leading to a significant reduction in testing time.
- Identified and removed redundant function calls from Java production code which increased the speed of the critical remote device by 5 minutes, awarded Star of Iteration in Q1 2021
- Collaborated with Product Managers, Engineering Managers, and Software Engineers to deliver interfaces to client with fast iteration following Agile methodology. Made use of **JIRA, Confluence, GitHub** extensively
- Implemented a full stack React application using **Java Microservices, MongoDB, Spring Boot** and **Python**, this was used to track 30,000 data point mappings between core features and code changes
- Extracted data from **Apache Subversion, Git** repositories, performing large scale exploratory data analysis on features, diff tracking and code changes using **NumPy** and **pandas** modules

ACADEMIC PROJECTS

Cloud Integrated Development Environment (IDE) | Dec 2022
- Developed a Cloud IDE with serverless, and event driven architecture communicating with messaging queues in Amazon Simple Queue Service (SQS) and a NoSQL backend in **DynamoDB**
- Leveraged Docker containers n Amazon Elastic Compute (EC2) to compile and run code in multiple programming languages - Java, Python, Go, Ruby, JavaScript, and C++
- Integrated Open AI Completions API with **AWS Lambda** to create Code Completion functionality in IDE

Smart Photo Cloud Album | Nov 2022
- The application allowed users to upload photos as well as search for Photos through voice and text using AWS Transcribe, Elasticsearch. The entire architecture was built with **AWS CloudFormation**
- Implemented CI/CD with AWS CodeBuild, CodePipeline so that any commits to GitHub would trigger a pipeline that can push changes to the relevant S3 buckets and Lambda functions