KUNAL JOSHI

📞 (212) 365-0113 ✉ kjoshi@nyu.edu 💼 kjoshi99 ⭘ HayWiir 🌐 kjoshi.dev

EDUCATION

New York University - Courant Institute of Mathematical Sciences — Sep 2021 – May 2023
Master of Science in Computer Science; GPA: **3.7/4.0**. — New York, NY

- Coursework: Big Data ML Systems, Distributed Systems, Cryptocurrencies, Applied Cryptography, Systematic Trading
- Teaching Assistant for Applied Cryptography (Spring '22)

Manipal Institute of Technology — Sep 2016 – July 2020
Bachelor of Technology in Computer Science; Minor in Computational Mathematics; GPA: **8.7/10.0**. — Manipal, India

- Received the Manipal Merit-and-Means scholarship - awarded to top performers in the University Entrance test.
- Coursework: Data Structures, Algorithms, Networks, Parallel Computing, Distributed Systems, Linear Algebra, Time Series Analysis

EXPERIENCE

Walmart Global Tech — May 2022 – Aug 2022
Software Engineer III Intern — Sunnyvale, CA

- Built backend REST APIs for collecting user experience feedback for the Walmart GoLocal client website using Java SpringBoot and Kafka.
- Created frontend components for aforementioned feedback feature in Node.js and React working alongside UX team.
- Created a Kibana dashboard using Elasticsearch to consume feedback data and provide analytics.

National Instruments — July 2020 – June 2021
Software Engineer — Bangalore, India

- Fixed multiple bugs and added features in LabVIEW modules and tool-kits for Control Design, Simulation, Mathscript, VI Analyzer, Digital Signal Processing.
- Created internal tooling which allowed for auto setup of VMs using Python. Used across multiple teams for automated tasks across org. It brought time savings of over 100 daily developer hours.
- Owned migration of team's Build and Test pipelines from internal tools to Azure DevOps. Successfully completed migration pre-2021 release schedule and reduced pipeline time by over 50%.
- Responsible for mentoring 2 summer interns and participated in intern recruitment efforts.

Samsung Research Institute — Jan 2020 – June 2020
Software Engineer Intern — Bangalore, India

- Involved in the development of MAC protocol for 5G (mmWave) SmallCell over the Qualcomm FSM100XX platform.
- Worked on C-based framework for testing various features of the MAC scheduler.
- Successfully overhauled the Unit Test framework from the Macro Cell project to SmallCell team requirements.

praktice.ai — May 2019 – July 2019
Software Engineer Intern — Bangalore, India

- Automated the creation and delivery of weekly reports to multiple clients using AWS Lambda, S3, RDS, DynamoDB and Google Charts API. This saved over 20 hours of weekly developer time. Service also generated on-demand reports.
- Added features to the existing AI chat-bot which would allow medical professionals to take over. Became a major selling point of the service.
- Worked on automation of various data collection tasks using Selenium and BeautifulSoup and fixed bugs in the main product utilizing AWS Cloudwatch.

SKILLS

Programming: Python, C, C++, Java, Javascript, Scala, Elixir, Node.js, React, SQL, LabVIEW, Solidity
Technologies: AWS (Lambda, S3, RDS, DynamoDB), CI/CD Pipelines, Hadoop, Spark, Hive, Kafka, Bash, Git, Postman

PROJECTS & RESEARCH

Using Internal Bar Strength as a Key Indicator for Trading Country ETFs 🌐 | *numpy, Pandas, Systematic Trading* — 2023

- Investigated the effectiveness of using internal bar strength as a key indicator for trading ETFs.

Practical Byzantine Fault Tolerance in Elixir ⭘ | *Elixir, Erlang* — 2022

- Implemented the PBFT consensus algorithm in a partially synchronous network simulation.

Cross-Domain Shopping, Stock Trend and Consumer Review Analysis 🌐 | *Hadoop, Hive, Spark, Java, Python, SQL, Tableau* — 2022

- Analyzed relationships between stock prices, stock news, and users' e-commerce behavior.
- Used Big Data tools to study review distribution over time and examine patterns between attributes such as upvotes, creation time, and sentiment.