Suryaa Rajinikanth

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EDUCATION

Georgia Institute of Technology

Atlanta, GA

Bachelors of Science in Computer Science (Intel. + Info), GPA: 3.9/4.0

May 2025

• Coursework: Computer Org. & Programming, Data Structures & Algorithms, Discrete Mathematics, Linear Algebra

WORK EXPERIENCE

Fidelity Investments

Merrimack, NH

Full Stack Engineer Intern - (Distributed Compute)

May 2023 - Aug 2023

- Pioneered the overhaul of a company-wide distributed cloud computing service Click2Compute, enabling customers to perform operations 20% faster than prior and reducing server stress/load times by tenfolds.
- Designed and executed a lightweight Angular-based implementation to replace outdated, unreliable front-end.
- Introduced a variety of services to monitor and toggle essential VM functions with sorting and searching by key identifiers. Consumed this data with tables and visualizations using client-facing Angular components.
- Wrote 100% coverage tests for code. Performed automated checks with custom Jenkins pipelines to ensure reliability.
- Developed a suite of server-side APIs in Go to interact with the front end and create full-stack applications.
- Implemented this backend using Docker-Compose for reliable multi-container deployments on the cloud.
- Studied implementations of Ansible and Python to automate deployment & orchestration.

TensorDock

Boxborough, MA

Product Manager - (Marketplace)

March 2022 - Present

- Managed and developed the flagship product of a multi-million dollar company funded by Haystack VC, helping grow monthly revenue by 100x over 6 months from our decentralized compute marketplace.
- Utilized OpenStack Nova & Open vSwitch, enabling PCI pass-through and secure VM internet accessibility for a growing network of 100+ individual global hosts to rent out GPUs to customers.
- Created Python software for host node setup and onboarding with rigorous checks for infrastructure reliability.
- Leveraged Rundeck to modify the PostgreSQL database. Reduced onboarding time by ~95% and cut costs 10x.
- Added individualized deployment features to platform based on client needs using SLURM, Kubernetes, and Docker.
- Built front-end features for essential VM functions using Python and JS on the Flask framework.

Smith Investment Fund

College Park, MD

Quantitative Analyst
Developed infrastructure for a Python high-frequency back tester allowing ~1400x more precision in trades on minute candle data. Created modular channels for alternative data including news, social media, and government statistics.

- Studied and implemented models such as pairs trading and Fama-French to long/short given stocks in trading Alphas.
- Used Pandas, TensorFlow, NumPy, and Matplotlib to identify and analyze trends, allowing strategies to profit >300%.

University of Maryland

College Park, MD

Undergraduate Web3 Researcher

March 2023 - May 2023

- Designed smart contracts in Solidity under Prof. GP Saggese, contributing to a revolutionary DeFi platform.
- Made a comprehensive deployment notebook for DaoSwap, creating a mock ERC20 token on the Goerli network and deploying a factory/deploy swap contract for the token.

Boston University

Boston, MA

Full Stack Engineer Intern

April 2022 - September 2022

- Oversaw development of a multi-platform social media app in Flutter, allowing a 60% reduction in development time.
- Stored users and incidents in Firebase Cloud Firestore NoSQL database and developed an authentication with Google feature to increase user credibility and reduce registration times.

PROJECTS

GoBackTester | Go, Python, Selenium, BeautifulSoup

- Developed a trading Alpha back-tester using Go and Forex data scraped with BeautifulSoup, profiting 3.4x in 2 days.
- Leveraged GoRoutines and visualization libraries to test strategies on millisecond data (millions of data points/day).

JOS Alpha | Python, BeautifulSoup, MyGrad Tensor

- Helped produce a novel Alpha, leveraging web-scraping with BeautifulSoup and Gated Recurrent Units to analyze daily sentiments of news articles to long/short stocks in the S&P500.
- The use of pairs trading and analysis of unstructured data allowed 6% profit and a record-low drawdown.

GoTransShipment | *Go*

- Created a TransShipment solver in Go for MATH498T that outperformed manual solving by >50x for given nodes.
- Leveraged the Northwest Rule and Stepping Stone method to efficiently find the optimal feasible solution.

SKILLS

Languages/Frameworks: Java, Python, C, Go, Dart, Ansible, Solidity, SQL, Angular, Javascript, HTML/CSS

Software: Kubernetes, Docker, OpenStack, SLURM, Flutter, Firebase, Postgres, TensorFlow, Pandas, NumPy