JAYASAI L. SOMASUNDARAM

(954) 895-8246 | jsomasundaram3@gatech.edu | jayasaisomasundaram.com | linkedin.com/in/jsai23

INTRODUCTION

An ambitious Computer Science student having a strong foundation in programming languages such as Python, Go, Java, and C/C++. Hands on experience in Cloud Architecture, Distributed/Connected Systems, and Applied Machine Learning for over four years. Detail-oriented, execution-focused, and a dedicated team player, with genuine curiosity in ground-breaking technical innovation.

EDUCATION

Georgia Institute of Technology- B.S. in Computer Science Atlanta, GA – May 2024
SAT: 1570/1600 **GPA:** 3.71/4.00 **Scholarships:** HOPE and Zelle Scholarships **Achievements:** Dean's Scholar
Involvement: Machine Learning Club, Quantitative Finance Club, Trading Club, HexLabs (Hackathons)
Course Work: Intro to AI (**Python**), Machine Learning (**Python**), Design and Analysis of Algorithms (**Java**), Data Structures (**Java**), Embedded Systems (**C++**), Computer Organization and Programming (**Assembly and C++)**

EXPERIENCE

American Express **Phoenix, AZ**
Software Engineering Intern May 2023 - Present

- Migrated on-site infrastructure utilizing the **6 Rs of migration** (re-host, re-platform, repurchase, retain, retire, and re-factor) into **Cloud Native Architecture** programmed in **Python** and **GoLang** to optimize latency of **Distributed Systems** deployment that play active roles in Fraud Detection Technology starting from POS systems.

TiD (Technology and International Development) Lab at Georgia Tech **Atlanta, GA**
Undergraduate Researcher April 2023 – Present

- Collaborated **cross-functionally** with development teams to design a **Java Stack** based architecture utilizing **Spring Boot** for the backend and **ReactJS with Ant Design** for the front end for a COVID preemptive prevention platform.
- Reconstructed **regression-based targeting algorithm** in **Python** with **Sci-Kit Learn** to utilize an **IoT** based approach where any connected devices were used to identify at risk individuals raising response rates in initial tests by about 8%.

SalesStrike – CREATE-X Georgia Tech **Atlanta, GA**
Founder and Solutions Architect Jan 2022 - Present

- Developed a complete Backend utilizing **AWS CDK** written in **Python** and **Go** including **hosting, authorization, databases, APIs, user pools** and more saving over $20,000 in external development costs.
- Increased average Business Client's cashflow by 17% by freeing up Inventory and decrease average User's capital requirements in E-Commerce by over 50% utilizing the developed SAAS tool.
- Utilized **Unsupervised ML**, specifically the **K-Means algorithm** written in **Python** with **TensorFlow** deployed on **EC2** to select products with the quick sell through time based on sales data reducing stagnant inventory by 18%.

OIT (Office of Information Technology) Networking Team Georgia Tech **Atlanta, GA**
Networking Assistant Sep 2022 - Dec 2022

- Performed **firmware updates** and **re-configurations** working with **Chain-Loader x86 Assembly scripts** on access points, routers and switches via **SSH** or **Wired Connections** improving overall stability by 2%.
- Utilized **MongoDB** along with **Lambda** functions and **APIs** to update the Internal Admin Dashboard to decrease time spent on boiler plate tasks such as port configs, increasing efficiency of network switch deployment by over 30%.

PROJECTS

SGA Career Fair Full Stack Application Jan 2022 – Present

- Planned, Designed, Developed and Lead the deployment of a **Web Application** built on **AWS** with a **Python Backend** and **ReactJS Frontend** that replaced physical lines at career fairs school wide tripling the efficiency of job recruiting.
- Managed a team of student as well as full time Georgia Tech employees utilizing **Agile Development** principles.

Supervised and Unsupervised Learning to Optimize Long Term Stock Selection Sep 2021 – May 2022

- Applied **K-Means Clustering**, **GMM Clustering**, **Random Forest Models** and more to see if **Clustering Models** could find patterns in correlation of FAANG names for better stock selection resulting in statistically negligible results.
- Furthered the output of unsupervised models by using **RNNs** and **LSTMs** in attempting to identify trend also leading to negligible results.

ADDITIONAL INFORMATION

Notable Skills: Python, Go, Cloud Solutions Architecture, MySQL, MongoDB, Networking Distributed Systems, Fundamental Algorithmic Programming, Applied Neural Networks
Certifications: CMT Level I (Chartered Market Technician), AWS (Amazon Web Services) Certified Cloud Practitioner
Hobbies and Organizations: Eagle Scout, Day Trader, Basketball Player, E-Commerce, Cars and Bikes, Blockchain and DeFi