

ARCHIT PANDE

470 815-8177 | apande1@student.gsu.edu | [Website](#) | [LinkedIn](#) | [Github](#) | Atlanta, GA

EDUCATION

College of Arts and Sciences, Georgia State University

Aug 2023 - Present

Master's in Computer Science

GPA: 4.3 / 4.3

Graduate Research Assistant, Institute for Insight

- Responsible for designing the system architecture and deployment pipelines for generative AI/ML models. Currently working on designing a chatbot for people with anxiety disorders.
- Working with Redis as cache and vector database, and Kafka as the message bus while deploying the generative models in a Flask application using Python, Docker and Kubernetes.

College of Engineering, Guindy, Anna University

Apr 2021

Bachelor of Engineering in Computer Science

GPA: 7.67 / 10

EXPERIENCE

MYCOM-OSI

Apr 2022 - July 2023

Software Development Engineer

- Developed microservices in Java, leveraging Kafka, Elasticsearch, Docker and AWS EKS/OpenShift as underlying stack. Spearheaded the low-level design and implementation of an effective solution addressing data loss issues in raw counters and key performance indicators collection from network elements. It led to a 100% reduction in data loss and better management of network elements.
- Led several critical technology stack upgrades within the company, yielding a 10% reduction in operational costs and better microservices deployment management. Activities included transitioning Elasticsearch clients from Transport to REST client and updating helm chart deployments to the latest Helm version for better CI/CD management.
- Provided dedicated customer support to major telecom clients including Airtel, Vodafone UK, and Saudi Telecom, successfully resolving various technical issues and bugs to ensure optimal service delivery.

Senuelo Advertising

May 2020 - July 2020

Artificial Intelligence Developer Intern

- Designed and implemented an end-to-end NLG application that generates short articles on a given topic with the goal of creating relevant content to boost search rankings.
- Worked with the latest pre-trained language models (GPT-2 and CTRL) and fine-tuned the models on topic-specific datasets gathered by scraping the top 100 Google search results through a custom search engine. Allowed content writers to save up to 4 hours/article and the MVP helped generate 120 articles.

SKILLS

Functional: Data Structures and Algorithms, Programming, CI/CD, DBMS, TCP/UDP, Networks

Languages: Java (Expert), C++ (Proficient), JavaScript (Proficient), Python (Proficient)

Tools: Redis, Docker, Kubernetes, AWS, Elasticsearch, Maven, Kafka, Zookeeper, Springboot, SQL, Shell Scripts, OpenShift, Jenkins, Git, Jira

ACADEMIC PROJECTS

4-approximation algorithm for Zero Skew Trees - Java, Approximation Algorithms

- Implemented a 4-approximation algorithm for finding minimum length zero skew trees. The area of application includes VLSI clock routing, where the signal from a source should reach all the leaf nodes at approximately the same time to achieve synchronization. The algorithm provides a zero skew tree within a factor of 4 from the optimal tree length.

Implementation of Consistent Hashing for Distributed Cache Cluster - AWS, Java, ElastiCache, EC2

- Designed and implemented a distributed cache cluster leveraging AWS ElastiCache, integrating a customized consistent hashing algorithm in Java via the Amazon SDK for optimal load balancing across multiple nodes.

Blockchain Distributed System - Java, TCP and JSON

- Built a stand-alone blockchain and a distributed system where a remote client interacts with the blockchain API. Implemented the RSA Algorithm to generate and verify Decentralized Identifiers for the Self-Sovereign Identity use case. Added a JSON client-server interaction over TCP sockets. Gained an understanding of distributed systems and blockchains through first-hand implementation.

LEADERSHIP

- **Volunteer at Midtown High School**, Atlanta: Mentoring and aiding high school students of the G3 robotics team with Java programming and writing clean code. (Sept 2023- Nov 2023)
- **Student Organizer**, CEG Tech Forum, College of Engineering Guindy. (2017 - 2018)