

Akash Ganesh Babu

Email: akashsuper2000@gmail.com

Phone: +1-631-406-0836

Website: akashsuper2000.github.io

GitHub: github.com/akashsuper2000

Linkedin: linkedin.com/in/akash-g

EXPERIENCE

TBL Building Sciences

May 2023 – August 2023

Software Development Engineer Intern

New York, USA

- Created a microservice to aggregate metrics from 500+ sensors using **React and Nest.js** to enhance analytics.
- Implemented the **configuration system using MongoDB and GraphQL** for cloud-based remote sensor control.

Amazon

August 2021 – August 2022

Software Development Engineer

Chennai, India

- Designed a new device identification service using **Java and DynamoDB** to provide a granular feature customization.
- Automated the payment disbursement pipelines using **AWS Lambda and Redshift**, reducing processing times by 87%.
- Enabled touch capabilities in Home and Search for FireTV Auto devices using **Kotlin**, enhancing the User experience.

Amazon

January 2021 – July 2021

Software Development Engineer Intern

Chennai, India

- Developed the backend for FireTV over-the-air software publishing system using **Java, Spring, and DynamoDB**.
- Improved the integration pipeline for new FireTV programs using **RDS PostgreSQL and EC2**, speeding it up by 80%.

Madbee

May 2019 – June 2019

Software Development Engineer Intern

Chennai, India

- Designed and developed the user-facing website using **React and Canva** with 100% performance and SEO capabilities.
- Established **CI/CD pipeline infrastructure in Azure** and added integration tests, cutting deployment times to 1 hour.

EDUCATION

Stony Brook University

August 2022 – May 2024

Master of Science in **Computer Science**, GPA: 3.8/4

New York, USA

- Research Assistant and HPC System Administrator at Stony Brook AI Institute.
- Coursework: NLP, Computer Vision, Algorithms, System Security, Robotics, Data Science, Discrete Mathematics.

Amrita School of Engineering

June 2017 – June 2021

Bachelor of Technology in **Computer Science**, GPA: 4/4 with Distinction

Coimbatore, India

- Undergraduate Student Researcher at Smart Spaces Lab and Cyber Security Lab.

PROJECTS

Voice-based Ticket Booking System | Java, Spring, JSP, Oracle, Heroku

[GitHub](#)

- Developed a distributed algorithm in Java to handle **200 concurrent users** in the ticket booking system.

ViT Decision Transformer | Python, Tensorflow, Pytorch, OpenCV, Scipy, MuJoCo, Slurm

[GitHub](#)

- Designed a Decision Transformer with a ViT state encoder for **robotic control on Mujoco and Atari environments**.

Faculty Dashboard | Javascript, React.js, Node.js, MySQL, AWS, RestAPI

[Website](#)

- Developed the **authentication server using React** and the **backend system using Node.js** for the user dashboard.

LLM Chatbot Tutor - Pi School | Python, Streamlit, LangChain, HuggingFace, OpenAI

[Pitch](#)

- Created a **generative AI-based LLM chat application using Streamlit** for 25+ primary schools in Italy.

PUBLICATIONS

From Semantic Alignment to LLM Hallucination Origins: An Algorithmic Approach | EMNLP 2024

[Review](#)

- Using BLAST algorithm for text retrieval and semantic alignment to trace the origins of hallucinations in LLMs.

Toxic Comment Classification using Transformers | IEOM 2021

[Paper](#)

- Classifying comments from internet forums based on toxicity using LSTM, GRU, CNN, and Transformer architectures.

TECHNICAL SKILLS

Programming Languages: Java, Python, C++, Javascript, Bash, Ruby, Kotlin, Golang, Matlab.

Technologies: Docker, Kubernetes, Git, Jira, AWS, Slurm, MySQL, RestAPI, MongoDB, Redis, Hadoop, Spark, Kafka.

Frameworks: React, Node.js, Flask, Spring, Nest.js, GraphQL, PyTorch, Tensorflow, Django, Streamlit, OpenCV.