# Akash G

# akashsuper2000.github.io

# Experience

Amazon

#### TBL Building Sciences

May 2023 – August 2023

Software Development Engineer Intern

New York City, New York

Chennai, India

Chennai, India

- Designed and developed a new microservice that aggregates metrics from 500+ sensors from around the world.
- Developed a new configuration system to customize the user experience on the web application.

Software Development Engineer

August 2021 – August 2022

- Designed and developed a multi-dimensional device customization system to scale the FireTV ecosystem.
- Unified and automated several FireTV business reporting and disbursement pipelines.
- Enabled touch capability with full remote compatibility for FireTV Auto devices.

**Amazon**Software Development Engineer Intern

 $January\ 2021-July\ 2021$ 

• Designed and built a system to seamlessly onboard new partner programs into the FireTV ecosystem.

• Developed an OTA software update publishing system with program and device type granularity.

Madbee May 2019 – May 2019

Software Development Engineer Intern

Chennai, India

- Developed multiple end-to-end applications from scratch using React and Flask.
- Setup CI/CD pipeline infrastructure for the existing applications in Azure DevOps.

#### Education

## Stony Brook University

August 2022 – December 2023

Master of Science (Thesis) in Computer Science, GPA: 3.67/4

Stony Brook, New York

- Research Assistant at Stony Brook AI Institute and Computer Vision Lab.
- Teaching Assistant for CSE 303: Theory of Computation.

#### Amrita School of Engineering

June 2017 - June 2021

 $Bachelor\ of\ Technology\ in\ Computer\ Science,\ GPA:\ 9.26/10\ with\ Distinction$ 

Coimbatore, India

• Undergraduate Student Researcher at the Smart Spaces Lab and the Cyber Security Lab.

#### **Publications**

#### Toxic Comment Classification using Transformers | IEOM 2021

March 2021

• Classifying comments based on the toxicity using LSTM, GRU, CNN, and Transformer architectures.

#### Projects

## ViT Decision Transformer | Python, PyTorch, HuggingFace

April 2023

• Sequence model that predicts future actions based on past interactions and desired returns for robot control.

Shadow Removal Diffusion | Python, PyTorch, OpenCV, Tensorflow

December 2022

• Diffusion model that removes shadows from images through conditioning.

COVID-19 Tracker Dashboard | Flask, HTML/CSS, Pythonanywhere

January 2021

Web application to display the statistics of COVID-19 infection rates with state and district-level granularity.

Faculty Dashboard | React, NodeJS, MySQL, Heroku, GitHub pages

January 2020

• Web application for the faculty to manage course plans, timetables, leaves, and announcements.

Voice-based Transport Enquiry System | React, NodeJS, OracleDB, Heroku

October 2019

• Web application to book bus tickets with support for voice commands and text-to-speech.

# Technical Skills

Programming Languages: Python, Java, C, C++, JavaScript, TypeScript, Ruby, Kotlin, Lisp.

**Technologies**: React, Flask, NodeJS, NestJS, Spring, PyTorch, Tensorflow SQL, DynamoDB, MongoDB, GraphQL, Cassandra, MapReduce, Hadoop, Kafka, AWS, GCP, Azure.

#### Extracurricular

- Hosted AI Adept and other competitions as part of Anokha 2020, a nationwide TechFest.
- Volunteered for over 100 hours at the University's chapter of the National Service Scheme from 2017-2020.