# PRAJWAL V. ATHREYA

+1(959)-237-0577 | athreya.p@northeastern.edu | https://www.linkedin.com/in/prajwal-v-athreya | Portfolio Available for full-time opportunities from May 2025

An MS in AI graduate student with 3 years of industry experience in software engineering and artificial intelligence. Proficient in Python, Go, C++, and Java, seeking full-time opportunities for SDE roles.

#### **EDUCATION**

Northeastern University, Boston, MA Master of Science in Artificial Intelligence 2023 - May 2025

Relevant coursework: Foundations of Artificial Intelligence, Programming Design Paradigm

Natural Language Processing, Algorithms, Cloud Computing, Web Development

GPA: 3.9

Dayanandasagar College Of Engineering, Bangalore, KA

**Bachelor of Engineering in Automobile Engineering** 

Relevant coursework: Data Structures in C, Programming in C

2017 - 2021

GPA: 3.7

#### **EXPERIENCE**

# Software Engineer (Co-op) - Akamai, Cambridge, MA

July 2024 - December 2024

- **Cluster API** 
  - Added E2E tests using Chainsaw for CAPL (Cluster API Provider Linode) clusters.
  - Setup CI-CD pipelines for the new tests on GitHub Actions
  - Implemented Linode Cloud Firewall and Placement groups as a default resource for clusters.
- **CSI Driver (Container Storage Interface)** 
  - Optimized GOMAXPROCS to dynamically scale resource utilization for improved performance during CSI driver operations.
  - Added support for **Block Storage Encryption** of volumes.
  - Integrated **Prometheus** for metrics collection and **Grafana** for enhanced visualization and monitoring.
  - Implemented **OpenTelemetry** to enable tracing of **gRPC** function calls and improve observability.

## Software Engineer - UpUgo & Surgg Pvt Ltd, Bangalore, KA

November 2021 - July 2023

- **Workout Recommendation System** 
  - Containerized this service using Docker. Utilized Amazon Elastic Kubernetes Service(EKS) for container orchestration and load balancing.
  - Implemented in-memory caching and CDN-based caching for APIs resulting in improved retrieval speeds of approximately 30%.
  - Setup AWS Lambda to fetch data through APIs and start the retraining loop of the recommendation model.

### PROJECTS AND CLUBS

# Adversarial Attacks on Large Language Models 🗹

March 2024

Related Topics: Positional Encoding, Transformers, GPT2, Model Fine-tuning, Generative Model

- · Fine-tuned GPT2 to generate adversarial inputs with the aim of causing misclassification, achieving a success rate of approximately 60%.
- · Deployed this generative model with FastAPI as the backend framework to convert the inference module into an API, allowing it to be called upon text for testing adversarial examples.

## Image Processing Application 🗹

October 2023

Related Topics: MVC Architecture, Multi-Threading, Multi-Processing, Object-Oriented Programming

- · Built a full-scale image processing application employing MVC architecture in Java.
- Following said architecture and minor optimizations during pre-processing, processing times were reduced by approximately 70ms, improving the performance by almost 40%.

#### **SKILLS**

**Programming Languages** 

Bash, C++, Java, Node.js, Python, Go

Database

MongoDB, MySQL

**DevOps Operating Systems**  Docker, EC2, EKS, Elastic Beanstalk, Git, Lambda, S3, Chainsaw

Linux, Windows