


# PRAJWAL V. ATHREYA

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Available for full-time opportunities from May 2025

A graduate student specializing in artificial intelligence, with three years of industry experience. Skilled in **Python, Go, C++, and Java**; actively seeking full-time opportunities as a Software Development Engineer (SDE).

## EDUCATION

**Northeastern University, Boston, MA**

Sep 2023 - May 2025

**Master of Science in Artificial Intelligence**

Relevant coursework: Machine Learning, Programming Design Paradigm, Algorithms

GPA: 3.9

Natural Language Processing, Cloud Computing, Web Development, Information Retrieval

**Dayanandasagar College Of Engineering, Bangalore, KA**


2017 - 2021

**Bachelor of Engineering in Automobile Engineering**

Relevant coursework: Data Structures in C, Programming in C

GPA: 3.7

## EXPERIENCE

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

July 2024 - December 2024

• **CAPL (Cluster API Provider Linode)**

- Added E2E tests using **Chainsaw** for multiple flavors of kubernetes clusters.
- 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**

- Developed the recommendation algorithm and deployed it as a service.
- 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**

Docker, EC2, EKS, Elastic Beanstalk, Git, Lambda, S3, Chainsaw

**Operating Systems**

Linux, Windows