

# RITIK AMBADI

+1(857) 397-2939 | [ambadiritik@gmail.com](mailto:ambadiritik@gmail.com) | [linkedin.com/in/ambadiritik](https://www.linkedin.com/in/ambadiritik) | [ritikambadi.com](https://ritikambadi.com) | [github.com/ARitik](https://github.com/ARitik)

## Education

### Northeastern University

Master of Science in Computer Science - GPA: 3.92/4.0

Jan 2023 – May 2025

Boston, MA

- **Teaching Assistant for Computer Graphics (CS4300/5310)** across 3 semesters, mentoring 250+ students in OpenGL programming, 3D rendering techniques, and graphics algorithms.

### Jawaharlal Nehru Technological University

Bachelor of Technology in Computer Science - GPA: 8.9/10

Jun 2018 – Jun 2022

Hyderabad, India

## Experience

### Verve Motion

Backend Software Engineer Co-op

Jun 2024 – Dec 2024

Cambridge, MA

- Architected high-performance APIs handling 10K+ daily enterprise requests for exosuit telemetry and performance analytics using Go and AWS Lambdas.
- Delivered \$60,000 in annual savings by creating YAML-configured testing pipelines that automate gateway burn-in testing and eliminate manual hardware validation processes.
- Streamlined suit and gateway deployment by collaborating on a gRPC-based provisioning tool using Protocol Buffers to orchestrate Ansible playbooks, cutting infrastructure setup time by 80% from hours to minutes.
- Solved critical data gaps by implementing temporal data modeling and advanced SQL queries to enable historical workforce analytics despite lacking system-versioned tables.

### Eusty Web Services

Software Engineer

Jan 2022 – Dec 2022

Hyderabad, India

- Built a GST validation module using Python that integrated with government APIs to verify customer GSTIN numbers across 28 Indian states, improving data accuracy and compliance for 500+ MSMEs.
- Developed AWS Lambda APIs to automate lead capture for Eusty's CRM, enabling MSMEs to convert business inquiries into leads with auto-generated contacts and reducing manual data entry time from 15 minutes to under a minute per lead.
- Improved reliability of mobile data sync for MSME field sales teams by adding offline-first caching with React service workers and DynamoDB batch writes, reducing sync failures by 40% and ensuring updates persisted in poor network conditions.

### The School of Accelerated Learning

Software Engineer Intern

Sep 2019 – Dec 2019

Hyderabad, India

- Built reusable UIKit components with custom UITableViewCell and UICollectionViewCell classes in Swift, reducing code duplication by 25% and streamlining UI development.
- Contributed to a tutorials feature with efficient caching, async image loading, and video streaming, improving performance and user experience on mobile devices.

## Skills

**Languages** Go, Python, Java, C++, Javascript, Typescript, HTML, CSS

**Frameworks and Libraries** React, Node.js, Next.js, Django, Electron.js, JQuery, Tailwind, Bootstrap

**Cloud Infrastructure** AWS, Docker, Kubernetes, Terraform, Nginx, Ansible

**Databases and Caching** MySQL, PostgreSQL, MongoDB, GraphQL, Redis

**Data Streaming and Messaging** Apache Kafka, Apache Spark, RabbitMQ

**CI/CD and Testing** GitHub Actions, Bitbucket Pipelines, Jenkins, Ginkgo, Jest, JUnit, Cypress

## Projects

### Image Manipulation and Enhancement

- Developed an MVC-architected image processing suite with 12 high-performance operations natively coded in Java with consistent sub-100ms execution times on image operations and 95% test coverage.

### StreamForge - Stream Processing Framework

- Engineered high-performance distributed stream processing system (Go, HDFS) with exactly-once delivery semantics, custom task scheduling algorithms, and fault-tolerant integration with distributed file system across 10-node cluster.

### Biblio - Ecommerce Platform

- Engineered a mobile-responsive e-commerce platform supporting secure payments, account management, order tracking and robust session management, tested on 10,000+ records for scalability.