# Aaditree Jaisswal

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# **Professional Experience**

Advisor360

116 Ideas Inc. Aug 2025 -Present

Software Engineer Intern - Go, Shell, Docker, gRPC, Protocol Buffers, SQL

Remote

- Designed and implemented high-performance gRPC article caching microservice in Go with PostgreSQL backend, automated cleanup, and comprehensive test coverage.
- · Conducted unit and integration testing to ensure production readiness and system reliability

Software Engineer Intern - Python, Ansible, Jenkins

 $\mathrm{Jun}\ 2024 - \mathrm{Aug}\ 2024$ 

Weston, Massachusetts

- Reduced issue resolution time by 20% by engineering an automated Linux vulnerability assessment pipeline for internal endpoint systems using Python and Shell scripts; implemented a Tkinter-based GUI for real-time monitoring and packaged the tool into a standalone Windows executable using PyInstaller to streamline remediation workflows.
- Decommissioned 20+ non-production Linux servers by automating server workflows via Ansible playbooks and Jenkins pipelines, reducing manual effort and improving system uptime. Created and managed environment credentials (Dev. QA, Perf) to support cross-functional development teams and streamline access control.

Cisco Systems Inc. Aug 2021 — Jul 2023

Software Engineer II - Angular, NgRx, TypeScript, Node.js, Redux, Kafka, Redis, Java, CI/CD

Bengaluru, India

- Delivered 5+ major end-to-end features, accelerating roadmap delivery by 20%, including requirements gathering, design, coding, automated testing (Jest, Cypress), and deployment to multiple environments.
- Reduced analytics latency by 30% by engineering real-time Angular using NgRx UI modules for asset telemetry, lifecycle insights, and large-scale data processing, serving 50K+ enterprise users.
- Developed and integrated 80+ REST APIs with Java/Spring Boot backend teams, collaborating on schema design, data transformation, error handling, and ensuring type safety, and optimized JVM performance and memory usage by profiling API endpoints and tuning caching interactions for reliability and throughput.
- Tested and validated Kafka + Redis caching workflow to provide low-latency access to data lake information, validating polling strategies, failover mechanisms, and memory-efficient caching.
- Managed CI/CD pipelines for code validation, automated testing, and environment deployments, ensuring production-ready
- Implemented monitoring and observability practices, tracking key metrics (latency, error rates, cache hits), and debugging unfamiliar codebases under tight timelines.
- Mentored 5+ engineers and conducted 50+ peer code reviews, upholding 90%+ code quality standards.
- Authored comprehensive feature documentation and led QA processes while participating in on-call incident response, collaborating with technical writers and cross-functional teams to publish best practices in Confluence and resolve urgent production issues.

#### Education

## University of Massachusetts Amherst

Sep 2023 — May 2025

Master of Science in Computer Science

GPA: 3.9 Aug 2017 — May 2021

# MKSSS's Cummins College of Engineering for Women, Pune

Bachelor of Technology in Computer Engineering

# Research & Publications

# ${\bf Mathematical\ Expressions\ in\ Software\ Engineering\ Artifacts\ }\mid {\it Publication}$

• Curated a custom dataset of 1,500+ annotated bug reports and built a tool to identify mathematical expressions (MEs), increasing research efficiency by 20%+ in projects focused on ME-based issue detection.

#### Classification of Handwritten Indic scripts using Deep Learning | Publication

• Employed a deep learning approach to proficiently classify and identify twelve handwritten Indic script languages.

#### Effect of Hyperparameters on Backpropagation | Publication

 Analysed 10+ hyperparameter configurations during backpropagation training runs on multiple datasets; achieved a 7-10% improvement in model convergence rate and stability.

## Technical Projects

## Instasafe | Demo Video | Github | JavaScript, HTML, CSS

- Devised a browser extension employing fuzzy keyword matching and a pre-trained NLP model, identifying and flagging 95% of harmful content on child influencer accounts with a 98% precision rate.
- Crafted a trust score system to monitor user behavior and automatically censor users identified as zero-trust offenders.
- Designed a guardian dashboard enabling transparent moderation and review of flagged content.

# Ummeed | Demo Video | Github | Python, Django, GeoPy

- Co-developed a Django-based platform to track global humanitarian issues, integrating 10+ issue profiles, real-time chat, and educational content.
- Integrated NLP modules for real-time clustering of 1,000+ news and social feeds, with interactive geospatial views powered by Google Maps and GeoPy.

# Skills

Programming Languages: Go, Java, Python, TypeScript, JavaScript, C++, R

Frameworks & Libraries: Angular, React, Node.js, Django, Flask, TensorFlow, PyTorch

Distributed Systems & APIs: gRPC, REST APIs, GraphQL, Protocol Buffers, Kafka, Microservices

DevOps & Cloud: Docker, Kubernetes, Jenkins, GitHub Actions, Terraform, GCP, Azure

Databases: PostgreSQL, MySQL, MongoDB, Elasticsearch

Testing: Unit Testing, Integration Testing, Cypress, Jest