Aaditree Jaisswal

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Professional Experience

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.
- Refactored and enhanced the recording pipeline with a state-based service architecture, on-device session storage manager, robust error handling, and recovery logic to ensure resilient, PRD-compliant multimedia recording.

Advisor360   Jun 2024 — Aug 2024
Software Engineer Intern - Python, Ansible, Jenkins   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

- Championed automated testing (Jest, Cypress), increasing test coverage by 35% and reducing production defects by 25%, which safeguarded regression testing across 5+ major product features and accelerated roadmap delivery by 20%.
- 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 releases.
- 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

MKSSS's Cummins College of Engineering for Women, Pune   Aug 2017 — May 2021
Bachelor of Technology in Computer Engineering

Research & Publications

Mathematical Expressions in Software Engineering Artifacts | *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