

# Aaditree Jaisswal

[aaditree.github.io/portfolio](https://aaditree.github.io/portfolio) | [linkedin.com/in/aaditree-jaisswal](https://linkedin.com/in/aaditree-jaisswal) | [github.com/aaditree](https://github.com/aaditree) |  
aaditreejaisswal06@gmail.com | (413) 437-6757

## Professional Experience

### Advisor360 - Software Engineer Intern

Weston, USA

Infrastructure - Python, Ansible, Jenkins

Jun 2024 – Aug 2024

- Engineered 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, streamlining remediation workflows and reducing issue resolution time by 20%.
- Automated server workflows via Ansible playbooks and Jenkins pipelines to decommission 20+ non-production Linux servers, reducing manual effort and improving system uptime. Also created and managed environment credentials (Dev, QA, Perf) to support cross-functional development teams and streamline access control.
- Partnered with cross-functional teams to validate rollout milestones and risk-mitigate credential handling.

### Cisco Systems - Software Engineer II

Bengaluru, India

Customer Experience Cloud — Angular, NgRx, TypeScript, Node.js, Redux, Git, Jira

Aug 2021 – Jul 2023

- Delivered 5+ major end-to-end features, leading requirements gathering, design, coding, automated testing (Jest, Cypress), and deployment, accelerating roadmap delivery by 20% and ensuring seamless releases.
- Engineered Angular + NgRx UI modules for asset telemetry and lifecycle insights, serving 10K+ enterprise users; reduced analytics latency by 30% and improved system reliability by proactively identifying and resolving critical production bugs.
- Integrated 20+ REST APIs with UI components, collaborating with backend teams on API schema design, data transformation, and robust error handling; performed comprehensive API and UI testing using Postman and Cypress.
- Organized and maintained automation test suites by scenario and feature, achieving 90%+ test coverage and enhancing test infrastructure maintainability.
- Conducted 50+ peer code reviews and mentored 5+ engineers, upholding 90%+ code quality standards and fostering a collaborative, high-performance team culture.
- Authored and maintained detailed feature documentation, including component usage, feature flows, edge cases, troubleshooting, and testing procedures; collaborated with technical writers to publish official documents and best practices in Confluence.
- Led QA for owned features, documenting testing workflows and best practices, and participated in on-call incident response to resolve urgent production issues, coordinating with cross-functional teams for timely resolution.

## 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 – Jul 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

- 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 & Frameworks:** Python, Java, C++, TypeScript, JavaScript, R, HTML, CSS, Angular, React, Node.js, Django, Flask, TensorFlow, PyTorch, Redux, Cypress, GeoPy

**Version Control, DevOps & Testing:** Git, Perforce, Jenkins, Ansible, Shell Scripting, Cypress

**Databases & APIs:** PostgreSQL, MySQL, SQL, Elasticsearch, RESTful API integration, Swagger, Postman

**Tools & Platforms:** Linux, Firebase, GCP, Wireshark, Jira, Confluence, MS Excel, Tableau, Power BI

## Achievements

- \$3,000 Recognition Award – Earned in the Bold Bets ONEx Data Challenge Validate Phase for API-based data collection innovation at Cisco.
- Cisco MVP Peer Award – Recognized for collaborative innovation on customer-impacting projects used by 50K+ users.
- Local People's Choice Winner, NASA International Space Apps Challenge 2020 – Built a real-time satellite data visualization tool engaging 1K+ users.
- Google DSC Lead – Organized and led coding/AI workshops for 20+ underprivileged students, fostering technical growth and confidence.