

# RAMACHANDRAN KULOTHUNGAN

Buffalo, NY • (716) 9947155 • ramachandran.kulothungan@gmail.com  
linkedin.com/in/ramachandran-kulothungan • github.com/RamachandranKulothungan • Open to relocate

## EDUCATION

### University at Buffalo

Master of Science in Computer Science

Buffalo, NY, USA

August 2024 - Present

### Malaviya National Institute of Technology

Bachelor of Technology

Jaipur, India

July 2016-June 2020

## SKILLS

**Programming:** Python, JavaScript, TypeScript

**Frameworks:** Django, FastAPI, Next.js

**AI/ML:** TensorFlow, PyTorch, Scikit-Learn, Pandas

**Cloud & DevOps:** AWS, Terraform, Kubernetes, Docker

**Domains:** Machine Learning, Web Development, DevOps,  
Test Automation

## PROJECTS

### Lighthouse, UB AI Hackathon | FastAPI, NextJS, Tailwind CSS, ChatGPT

- Built an AI-powered application for the Lighthouse Free Medical Clinic, integrating OpenAI models with Next.js and FastAPI to optimize insurance recommendations, streamlining operations by 40%.

### Anime Recommendation Engine | ScikitLearn, Pandas, Streamlit

- Built a robust anime recommendation system leveraging a dataset of 700K+ users and 5M+ ratings to analyze user preferences and demographics.
- Implemented and evaluated three diverse recommendation models, utilizing content-based and collaborative filtering techniques, including KNN and matrix factorization, to provide personalized anime recommendations.
- Integrated user registration and favorite tracking functionalities within the Streamlit application, allowing for personalized anime recommendations.

### EmailWhiz - Bulk Cold Emailer | Django, JavaScript, Tailwind CSS, Gemini, SMTP

- A Django based Web Application, enables users to send 100+ personalized cold emails and follow-ups directly without Gmail redirection.
- Introduced innovative use of Gemini AI technology for automating template generation, reducing email creation time by 50 percent.
- Designed a responsive UI with Tailwind CSS, achieving a 30% improvement in user workflow efficiency.

## WORK EXPERIENCE

### Software Development Engineer in Test

Dassault Systemes

April 2021–August 2024

- Architected a Python-Robot Framework-based API and UI test automation suite, adopted by 40+ teams, accelerating regression testing by 60%.
- Implemented a SumoLogic dashboard for real-time test pipeline analytics, improving automated test visibility and health tracking for 30+ cross-functional teams.
- Engineered a full-stack application deployed on K8s and AWS to centralize Robot Framework keyword searches across 10+ Git repositories.
- Cut test pipeline debugging time by 40% by automating failure diagnostics with a custom GHA workflow that stored reports in AWS S3 and displayed summaries within the workflow.

### Software Engineering Associate

Dassault Systemes

August 2020–March 2021

- Delivered 70+ UI and API automated tests using RF within 3 months, ensuring 100% regression test coverage.
- Contributed to the end-to-end testing, validation, and release of 2 core platform services, ensuring seamless SDLC integration.

## ACHIEVEMENTS

- 1st Place at UB AI Hackathon (September 2024) out of 50 teams.
- Recognized for outstanding performance at Dassault Systèmes (June 2023 – December 2023).
- Awarded for enhancing automation frameworks, reducing test execution time by 50% (January 2021 – June 2021).

## CERTIFICATIONS

- AWS Cloud Practitioner Essentials (Amazon Web Services, Issued 2025)
- Data Structures and Algorithms (GeeksForGeeks, Issued 2023)