

# RAMACHANDRAN KULOTHUNGAN

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## WORK EXPERIENCE

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| <b>Software Dev Cloud Intern</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Nokia Bell Labs, Chicago</b> | June 2025–December 2025 |
| <ul style="list-style-type: none"><li>• Built cloud-native lifecycle automation for Nokia CMM across Kubernetes environments (NCS, OpenShift) using NCOM, enabling reliable deployment, scaling, and upgrade workflows.</li><li>• Developed an extensible Python library exposing 30+ standardized API and logging abstractions, enabling programmatic integration across automation and orchestration workflows using Jenkins.</li><li>• Automated CMM re-installation workflows for T-Mobile (TMO) using Python and NCOM+ tooling, to reduce manual re-installation time from 9 hours.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                         |
| <b>Software Development Engineer</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Dassault Systemes</b>        | August 2020–August 2024 |
| <ul style="list-style-type: none"><li>• Built a scalable Python-based internal automation framework adopted by 40+ teams to orchestrate UI and API-driven workflows and CI/CD execution using goCD and Github Actions, significantly reducing manual operational effort.</li><li>• Led a platform decentralization initiative by modularizing shared libraries, defining versioned packaging patterns, and automating artifact publishing to Artifactory using GitHub Actions, enabling team-owned repositories and independent releases.</li><li>• Worked on cloud infrastructure migration and optimization on AWS, designing reusable Terraform modules and right-sizing EC2 resources to achieve 60% cost reduction and faster environment provisioning.</li><li>• Engineered and deployed an internal developer productivity tool (Django, AWS, Kubernetes) to index and search library keywords across 10+ repositories, improving discoverability and onboarding efficiency.</li><li>• Implemented centralized observability and analytics using structured logging and Sumo Logic dashboards to provide real-time visibility into test pipeline health for 30+ teams.</li><li>• Led data validation for a production AWS DMS migration (MySQL → PostgreSQL) by building automated Ruby/SQL integrity checks, ensuring data correctness and reducing manual validation effort by 90%.</li><li>• Recognized with 2 company awards for engineering contributions that reduced system execution time by 50% and improved reliability and scalability across organization-wide platforms.</li></ul> |                                 |                         |

## PROJECTS

- Agentic Job Application Drafter** | LangChain, Browser Use (YC W25), OpenRouter, FastAPI, Next.js
- Polls RSS feeds for job links and executes a LangChain workflow per job link using Browser Use Agent to extract form XPaths, attaching field values using LLMs, and auto-fill applications through a browser extension.
- Agentic Trip Planner** | Langgraph, OpenRouter, Streamlit
- Created an agentic AI vacation planner using LangGraph and Grok LLMs, integrating Google Maps APIs, currency conversion, and calculation tools to automate personalized itineraries and cut planning time
- EmailWhiz - Bulk Cold Emailer** | Django, React, Tailwind CSS, MongoDB, GCP
- A Django based Web Application, enables users to send 100+ personalized cold emails and follow-ups directly without Gmail redirection.
- Anime Recommendation Engine** | ScikitLearn, Pandas, Streamlit
- Leveraged a dataset of over 700K users and 5M ratings to build a robust anime recommendation system, implementing and evaluating three models, including KNN and matrix factorization, to provide personalized recommendations.

## SKILLS

<b>Programming:</b> Python, JavaScript, C, Java	<b>Frameworks:</b> FastAPI, Next.js, Django, React
<b>Cloud &amp; DevOps:</b> AWS, Docker, Kubernetes, Terraform, GitHub Actions	<b>Databases:</b> PostgreSQL, MySQL, MongoDB
	<b>Domains:</b> Web Development, DevOps

## EDUCATION

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|---------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>University at Buffalo</b>                                                                            | Buffalo, NY, USA            |
| Master of Science in Computer Science                                                                   | August 2024 - December 2025 |
| • Relevant Coursework: Algorithms, Computer Security, Computer Vision, Deep Learning, Operating Systems |                             |
| <b>Malaviya National Institute of Technology</b>                                                        | Jaipur, India               |
| Bachelor of Technology                                                                                  | July 2016-June 2020         |