

KARTHIK SRIVATHSAN SEKAR

Flagstaff, AZ | (832) 732 5504 | karthiksri2023@gmail.com | [Linkedin](#) | Portfolio_Website | [Medium](#)

EDUCATION

Northern Arizona University, USA
Master of Science in Computer Science

Aug 2023 – May 2025
Current GPA: 4.0/4.0

Sastra University, India
B. Tech in Computer Science & Engineering

Jul 2016 – May 2020

WORK EXPERIENCE

NAU, USA – System Administrator

Jan 2024 – Present

- Deployed licensed and unlicensed applications across 1500+ devices using SCCM and Jamf, including student laptops and Lab computers.
- Developed scripts in PowerShell, python, and Selenium to automate application installations, silent installation and fetch latest versions from the internet
- Automated repetitive tasks and server monitoring using bash and Python scripts, improving efficiency and reducing manual workload by setting up CRON jobs to send alert emails.

NAU, USA - Graduate Teaching Assistant

Aug 2024 – Jan 2025

- Discovered and addressed gaps in personal knowledge while teaching, leading to a deeper understanding and refinement of expertise in data structures and algorithms.

TATA Consultancy Services, India - DevOps and API developer

Apr 2022 – Apr 2023

- **Microservices Deployment, Monitoring, and Observability:** Led the deployment of insurance-focused microservices on AWS ECS, integrating CI/CD pipelines with Jenkins, Terraform, and AWS CodePipeline for automated deployments. Implemented observability using AWS CloudWatch and Prometheus to monitor service performance, ensuring reliability, scalability, and proactive issue resolution across environments.
- **API Development, Data Resiliency, and Backup:** Designed and tested RESTful APIs using AWS API Gateway, Lambda, and DynamoDB, securing access with IAM roles and Cognito while optimizing insurance data workflows for performance. Ensured data resiliency by leveraging Amazon RDS with multi-AZ deployments and DynamoDB for NoSQL storage, implementing automated backup and snapshot policies to meet disaster recovery and compliance requirements.

TATA Consultancy Services, India – System Administrator

Nov 2020 – Mar 2022

- Backup Infrastructure Development: My team and I were responsible for creating a robust backup infrastructure for the client. We actively participated in customer calls to understand their requirements, which helped us design a comprehensive backup lifetime plan tailored for each category of data. Leveraging Veritas NetBackup software, we successfully set up the infrastructure to meet their needs.
- Automation for Backup Admins: We developed scripts to automate repetitive tasks typically handled by a Backup Administrator, such as creating backup policies and monitoring the backup infrastructure. This not only streamlined operations but also significantly improved efficiency.
- Following the backup project, I joined the server team to work on migration projects. We supported them by creating and managing golden images, monitoring server loads, and performing stress testing to ensure system reliability and readiness.

SKILL

Programming Skills: Intermediate in HTML, Tailwind CSS, React, ExpressJS, Typescript, Node.js, Javascript, Python, C++, Pandas, PyTorch, Bash, SQL, NoSQL, Powershell, Xcode, Selenium, LLMs, Machine learning, Transformers.

Skills Known: Scripting, Cron Jobs, Deploying, Testing, Load Balancing, Server Monitoring, Server Migration, Backup, Disaster planning, Training models,

Software Known: MongoDB, NodeJS, Netbackup, JAMF, Self Service, SCCM, VMware, AD management, Excel, AWS, Docker, Kubernetes, Jenkins, Git, Github, Postman, Grafana, IAM, AWS CodePipeline, AWS EC2, lambda, API Gateway, DynamoDB

CERTIFICATIONS & PROJECTS

Malware Detection Using Behavioural Logs:-

- Developed a LLM ML model using LSTM to detect malicious applications using their behavioural logs. I trained the model with different behavioural logs for benign and malicious applications and tested the model and achieved around 93% efficiency.

Personal Portfolio Website

- Developed my personal portfolio website using Next.js, tailwind CSS and TypeScript. Implemented a scalable structure and highly loosely coupled codebase which enables me to make changes easily.

Scripts to remove unused packages and to remove a particular user's admin access.

- I wrote a python script which will detect the unused packages in JAMF using API calls and will display it in a GUI using PyGui. The user will be able to select and delete multiple unused packages from the JAMF using API calls.
- I also wrote a bash script which will accept the username as command line argument and then will remove the admin rights for the particular user. Meanwhile It also checks for accounts which are protected (like "root", "admin", etc) and then will refrain from deleting it.

CERTIFICATION & ACTIVITIES

- AWS Cloud Practitioner Certification, AWS

Aug 2022