# Kaveri Subramaniam

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Software Engineer with 2+ years of professional experience designing, developing, and deploying secure distributed cloud-based applications in high-level languages, mainly Java, and Python using Agile. Proficient in the architecture of Amazon Web Services, Oracle Cloud, and OpenStack. Hold a Master's degree in Computer Science focused on Distributed Systems and Middleware.

## WORK EXPERIENCE

**Arizona State University, Tempe, Arizona | ETS Linux Support** Feb 2022 – Jun 2022

- Implemented secure remote access for 150k+ students, faculty, and staff by configuring and deploying Duo Security Auth across all campus servers in AWX (Red Hat Ansible Automation Framework) using Ansible Templates and Vault.
- Enhanced campus resources for compute-intensive coursework by provisioning 3+ Unix packages and drivers using Ansible.

**Oracle Corporation, Bengaluru, India | Software Developer 2** Jul 2019 – Jul 2021

- Introduced the Tombstone feature for MySQL Database Services, automating the migration of 160k+ inactive records to enhance control plane performance and synchronize active instance record metadata on Resource Query Service.
- Enabled seamless streaming of customer logs from MDS' data plane to the web interface by coordinating the integration of 2 resources of MDS with Resource Query Services and Public Logging, utilizing Shepherd, Terraform, and Grafana.
- Facilitated swift integration of the Backup and Analytics team's resources with the Tombstone feature, RQS, and PL, earning praise for providing prompt support and streamlining the process with precise, well-defined tasks and code templates.

**MiQ Digital, Bengaluru, India | DevOps Intern** Jan 2019 – Jun 2019

- Migrated Nexus from AWS EC2 to AWS EKS, employing Kubernetes' StatefulSets and Helm to ensure high availability and automated scaling of this central component in response to the operational needs of services at MiQ.
- Automated team's report generation from Sheets and delivery to Gmail and Confluence, reducing the time taken from 2 days to 5 minutes, doubling the frequency, and encouraging other teams to create their own reports using the sheet as a template.

## TECHNICAL SKILLS

**Platforms**: Amazon Web Services, Oracle Cloud, Google Cloud, OpenStack, Linux
**Languages:** Java, Python, C, Shell Scripting (Bash, Zsh), C++, JavaScript, Markup (Json, Yaml)
**Tools:** Git, Maven, Jira, Terraform, Kubernetes, Ansible, TeamCity, Vercel, Prometheus, Grafana, Docker, MySQL

## EDUCATION

**Master of Science, Computer Science (Big Data Systems)** May 2023
Arizona State University, Tempe AZ GPA: 3.97/4.0
Relevant Coursework: Distributed Database Systems, Cloud Computing, Database Management Systems Implementation, Advanced Computer Network Security, Data Mining, and Data Visualization.

**Bachelor of Technology, Computer Science (Systems and Core Computing)** May 2019
PES University, India GPA: 8.9/10.0
Relevant Coursework: Software Engineering, Big Data, Cloud Computing, Computer Network Security, Operating Systems.

## PROJECTS

**Multi-Cloud Application Prototype** Fall 2022

- Demonstrated cross-cloud application deployment using Nova, Horizon, Neutron, and Glance on OpenStack, alongside SQS, S3, Lambda, and EC2 on AWS, a concept that can be extended to run enterprise applications across multiple Clouds.
- Streamlined infrastructure provisioning in Python using Boto3, enhancing readability, accelerating testing, and achieving a demo time under 20 minutes.

**Resource Description Framework over a Relational Database** Spring 2022

- Transformed Minibase into an RDF by incorporating Heapfiles, 5 index options, and 5 sorting options to efficiently store and retrieve Quadruples and related Labels, enabling in-depth analysis of query performance across data sizes and strategies.

## VOLUNTEERING

**Women Who Code, Cloud | Volunteer** Oct 2022 - Present

- Moderate Women Who Code events focused on career types, skills, and concepts in Cloud Computing.
- Advocate for communities within Women Who Code by actively engaging and collaborating on tools, events, and articles that would best support them.