

EDUCATION

Birla Institute of Technology and Science, Pilani
B.E in Computer Science and Engineering - GPA: 8.34/10

Hyderabad, India
Aug 2017 — May 2021

SKILLS

Languages Java, Python, C++, JavaScript, JQuery, HTML, PL/SQL
Frameworks and Tools Oracle Cloud Infrastructure, Kubernetes, Kafka, Flink, Maven, Git, Autonomous DB (ATP), Postman, Helidon, JMeter, JAX-RS, JPA (EclipseLink, Hibernate), Django, TensorFlow, Keras

WORK EXPERIENCE

Oracle **Bangalore, India**
Member of Technical Staff, Identity and Access Management *Jul 2022 — Present*

- **Oracle Access Governance** - Developed multiple REST based micro-services for Oracle's cloud based Access Governance solution.
- Developed the core provisioning logic implementing various design patterns such as Singleton, Factory and Builder.
- Wrote helm charts and helped with deployment and management of services across multiple node pools.
- **Oracle Adaptive Risk Management** - Built a HTTP servlet filter to intercept and analyse the risk of authentication requests.
- Built a standalone POC to re-authenticate requests based on factors such as location and timestamp.

Software Development Intern *May 2020 — Jun 2020*

- **Oracle Access Management** - Implemented two-legged and three-legged authentication flows using OAuth 2.0 for Facebook SSO.
- Performed load testing using JMeter to evaluate the performance difference between the two flows.

North Eastern Space Application Center - ISRO **Shillong, India**
Software Development Intern *May 2019 — Jul 2019*

- Created a cloud based web platform for running Geo-Spatial applications via python notebooks using Django.
- Used **OpenDataCube** to analyse and ingest remote sensing data obtained from satellites such as Landsat-8 and Sentinel-2.

RESEARCH PROJECTS

Multi-Modal DeepFake Detection using Spatial and Frequency Domain Analysis **Monash University, Melbourne (Remote)**
Undergraduate Thesis *Dec 2020 — May 2021*

- Improved the accuracy of DeepFake detection by exploiting high-level artifacts generated near the eye and lip region of the face.
- Trained a CNN classifier on DCT transformed frames from DFDC and FaceForensics++ video datasets.


Clustering Pollution Sources for India using Satellite Imagery **BITS Pilani, Hyderabad**
Undergraduate Research Assistant *Jan 2020 — Dec 2020*

- Ingested, processed and analysed remote sensing pollution data obtained from Sentinel-5P satellite using GDAL.
- Performed unsupervised clustering using Keras to identify groups of districts/states which had similar pollution signatures.
- Correlated the pollutants with socio-economic data to detect plausible causes such as population, mining, manufacturing industries.

PUBLICATIONS

1. **Sivaramakrishnan, K.,** Deka, L. & Gupta, M. in *Geo-intelligence for Sustainable Development* 109–125 (Springer, 2021).
https://doi.org/10.1007/978-981-16-4768-0_8.

CERTIFICATIONS

Oracle Cloud Infrastructure 2022 Certified Foundations Associate  **Feb 2022**
The coursework for this certification provided a fundamental overview of the functionality and services offered by OCI and a hands on experience on using IAM, Networking, Compute, Storage, and OCI Database.

ACHIEVEMENTS

Oracle Covid Hack - Winner **Jun 2020**
Developed a system to safely and securely manage queues for essential services during the Covid19 pandemic.

InnoHack 6.0 - Runner Up **Feb 2020**
Created an unsupervised classification model to detect faults in heavy machinery by using audio signals.

VOLUNTEER EXPERIENCE

Project Leader, Oracle Volunteering **Jan 2022**
Socio-emotional learning based Journaling Workshop - Conducted a workshop for underprivileged children of Project RISE with AROH Foundation to create awareness on the importance of mental health and how journaling can help processing one's feelings.