

EDUCATION

Stony Brook University, Stony Brook, New York

Aug 2019 – Dec 2020*

Master of Science in Computer Science | **CGPA: 3.67/4.00**

Coursework: Data Science, Computer Vision, Natural Language Processing, Algorithms, Distributed Systems, Databases

Graduate Teaching Assistant for Data Structures (CSE- 214) under Prof Ahmad Esmaili

SRM University, Kattankulathur, Chennai, India

Aug 2011 – May 2015

Bachelor of Technology in Computer Science Engineering | **CGPA: 9.52/10**

Coursework: Data Structures & Algorithms, AI, Data Mining, Image Processing, Operating Systems, Network Security

EXPERIENCE

Software Engineer

VISA Inc, Bangalore, India

Apr 2017 – Jul 2019

- **Identity & Access Management**: Streamlined IAM systems, by optimizing usability, developing over OpenID (Forgerock), OAuth and Federation related workflows for a Tier-0 application, serving gateway to 100+ services in the background.
- **Enrollment Workflows**: Redesigned features in .NET for user login flows and service entitlement pipeline, easing resource creation with smart suggestions and throttling functionality test coverage to 80% by improving error/exception visibility.
- **Stack Test tool**: Developed an automated performance monitoring tool to test end-to-end flow for the app, to help assess server health and performance bottlenecks of the application, saving 70% of the manual effort hours.
- **Microservice for data-migration**: Led a team of 5 to build and manage Docker container clusters, orchestrated using Kubernetes, migrating workloads on containers using Kafka Streams.

Systems Analyst

VISA Inc, Bangalore, India

Jul 2015 – Mar 2017

- **Jenkins integration**: Managed 250+ Linux/Windows VMs for troubleshooting and deployment of infra & services.
- **Splunk dashboards**: Visualized machine generated big data to check overall performance of various applications.
- **Automated Qualys patching**: Wrote Python/shell scripts to automate server remediation, **reducing manual time by 50%**.
- **SSL certificate upgrades**: Worked actively on cert upgrades and automated scripts to check for certificate expiry.

Product Development Fellow | Remote

Hasura, Bangalore, India

Nov 2017 – Feb 2018

- Implemented **conversational AI bots** for Facebook messenger platform. Link: <https://hasura.io/hub/users/utkarsh/>
- Designed and deployed voice skills for Amazon Alexa. **Gathered over 200+ activations within a month of Go-Live.**
- Gained hands-on experience in microservices & K8's clusters, while working with **CNCF (Cloud-Native) systems**.

TECHNICAL SKILLS

- Languages & Databases: Java, Python, Javascript, C/C++, C#, .NET, HTML5, CSS3, MongoDB, PostgreSQL, LDAP, DB2
- Platforms & Tools: AWS, GCP, Google Colab, Docker, Kubernetes, Tableau, Jenkins, Git, JIRA, Slack, IntelliJ, Eclipse, PyCharm
- Frameworks & Libraries: Spring Boot, Hibernate, Kafka, PyTorch, TensorFlow, Keras, Node.JS, Selenium, Ajax

PROJECTS & RESEARCH

- **Retail Sales Analysis (Sklearn/Pandas)**: Performed EDA on 1.7M records for hardware store. Used Apriori for market basket analysis, RFM for segmenting customers, T-SNE for grouping similar products and ARIMA model for time series forecasting.
- **Visa Exclusive Marketplace (Java)**: Designed a web-app for loyalty-driven project aimed at incentivizing VISA cardholders boost card payments, against exclusive offers/rewards, using VISA APIs, Facebook's OAuth2.0 auth and Graph API.
- **Restaurant Finder (Java SpringBoot)**: Delivered a full-stack application using Spring boot framework and React.JS backed by PostgreSQL DB. Configured REST endpoints using Hibernate ORM and documented API using SwaggerUI.
- **Pose Detection (Pytorch)**: Implemented PoseNet model on Human36M dataset to predict 3D poses from 2D sensor data. Implemented Kalman filter to correct noisy measurements from faulty sensors, with an average accuracy of 82%.
- **Unified Summarization of Scientific Papers (NLP)**: Extended existing approaches to implement a unified model, over Abstractive & Extractive ensemble, using bidirectional LSTM. Evaluated on ROUGE scores, with 43.08 recall.
- **Convolutional Neural Network (TensorFlow | OpenCV)**: Designed a CNN model from scratch, to perform 16-way image classification, highest accuracy observed was 92% with fine tuning of Alex Net.

AWARDS & CERTIFICATIONS

- **Passwordless Ultrasonic Auth**: Won Award for Best Security Hack @CEWIT'2020, using AudioQR. <https://bit.ly/2vC7fry>
- **Neural Networks and Deep Learning by deeplearning.ai** (Instructor: Andrew Ng) | Coursera | License: 93XU2LHY83A9
- **Developing Applications with Google Cloud Platform Specialization** | Coursera | License: A6XDCT7WBWHK
- **Immersive Data Science Program** | Greyatom | License: <https://www.credential.net/w95pzloi>
- **DevOps Certified** | Edureka | License: <https://edureka.co/verify> | ID: BTTVBVTA