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EDUCATION

Stony Brook University, Stony Brook, New York   **Aug 2019 – Dec 2020***
    Master of Science in Computer Science | CGPA: 3.67/4.00
    Graduate Coursework: Data Science, Computer Vision, Natural Language Processing, Analysis of Algorithms

IIIT Bangalore, India   **Sept 2018 – Aug 2019**
    Post Graduate Diploma in Full-Stack Software Development (Upgrad/Online)

SRM University, Kattankulathur, Chennai, India   **Aug 2011 – May2015**
    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**
- Streamlined Identity & Access Management systems, by optimizing usability and developing over OpenID (Forgerock), OAuth and Federation related workflows for a Tier-0 application (VISA Online), serving gateway to 100+ services in the background.
- Improved features for overhaul of user signup/login flows and service entitlement pipeline, adding 2FA workflows, easing resource creation with smart suggestions and throttling functionality test coverage to 80% by improving error/exception visibility.
- Developed a stack test tool to test end-to-end flow from proxy-layer to auth to landing page for the app, thereby helping assess server health and performance bottlenecks of the application, saving 70% of the manual effort hours.
- Presented PoC for "Visa Exclusive Marketplace", a loyalty-driven project aimed at incentivizing existing VISA cardholders boost card payments, in return for exclusive offers/rewards, using VISA APIs. Selected for finals in site-level hackathon.
- Leveraged Facebook's OAuth2.0 auth-protocol and Graph API using Sails.js, for profiling cardholders' social media profiles, to extract their interests/likes for personalized offers.

Systems Analyst   **VISA Inc, Bangalore, India**   **Jul 2015 – Mar 2017**
- Managed component provisioning for 250+ Linux/Windows VMs, handling configuration and deployment of infra & services.
- Visualized machine generated big data through Splunk dashboards to check overall performance of various applications.
- Formulated scripts to automate workflow of server remediation, reducing manual time by 50 % and human errors by 80%.
- Worked actively on critical SSL certificate upgrades and automated scripts to check certificate expiry.

Product Development Fellow | Remote   **Hasura,Bangalore, India**   **Nov 2017 – Feb 2018**
- Implemented chatbots 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.

PROGRAMMING SKILLS

- Languages: Java, Python, Javascript, C/C++, SQL, HTML5, CSS3
- Platforms & Tools: AWS, Google Colab, Pycharm, Visual Studio, Eclipse, Git, JIRA, Slack
- Frameworks: Spring Boot, Hibernate, PyTorch, TensorFlow, Keras, MEAN Stack, Node.JS

PROJECTS & RESEARCH

- **Retail Data Sales Anlaysis (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 modelling for time series forecasting.
- **Restaurant Finder:** Delivered a full-stack application using Spring boot and React.JS backed by Postgres DB. Configured REST endpoints using Hibernate ORM and 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 (Pytorch | 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.
- **Scene Classification and Object Recognition (OpenCV/Sklearn):** Created bag of SIFT feature representation of the images using K-Means clustering and histogram of gradients, trained SVM classifier with accuracy close to 79%.

AWARDS & CERTIFICATIONS

- **DevOps Certified** | Edureka | License: https://edureka.co/verify | ID: BTTVBVTA
- **ITIL Certified** |APMG International | License: ITIL/2000603220
- **Go Beyond** award for automation work at VISA Inc
- **Outstanding Performance** award at HP India, Ltd. during HPES Summer internship.
- **Immersive Data Science Program** | Greyatom | License: https://www.credential.net/w95pzloj
- **Neural Networks and Deep Learning by deeplearning.ai** (Instructor: Andrew Ng) | Coursera | License: 93XU2LHY83A9
- **Developing Applications with Google Cloud Platform Specialization** | Coursera | License: A6XDCT7WBWHK