

EDUCATION

Rutgers University | Princeton University, New Jersey
Master of Science in Computer Science – GPA: 4.0/4.0

Jan 2020 - [expected] Dec 2021

Visvesvaraya National Institute of Technology, Nagpur, India | B. Tech Computer Science

Aug 2013 - May 2017

SKILLS

Programming Languages	Java, Python, C, C++, Typescript, Lua
Mobile and Web Technologies	ReactJS, React Native, Redux, Angular2, HTML5, CSS, JS, JavaFX
Frameworks	Java-Spring (Boot, Cloud, Data, Security, Web), PySpark, Django-Python, Ionic, Flask
Databases	MongoDB, Oracle DB, MySQL, AWS RDS, H2
Other	Docker, Kubernetes, Consul, Vault, Jenkins, OpenCV, Junit, Hibernate, Kafka, Redis, Fluentd, Fluent-bit, Maven, Prometheus, OpenShift, OpenWhisk.

WORK EXPERIENCE

Adobe Inc. | Software Developer Intern | Developer Experience – Acceleration Team *June 2021 - Sept 2021*

- Initiated and developed Rate Limited Logging using **Fluent-bit** log processor for the Adobe I/O runtime team.
- Implemented in **Lua** to limit the log rate of customers to 10MB per **activation**, thus reducing **Splunk** storage cost for business.
- Improve latency for all the **Adobe Experience Cloud** customers by setting equal size thresholds on logs generated by them.
- Developed a feature in **Fluentd** to calculate overall latency for logging to meet SLAs, using **Fluentd** plugins and **Ruby** scripting.

Rutgers Rail and Transit Program | Graduate Research Assistant | New Jersey *Aug 2020 - Present*

- Developed an Intelligent Grade Crossing Tool for Federal Railways to reduce the 95% accidents occurring due to Trespassing.
- Initiated the design and development of the backend system using **Python Flask APIs** and **MongoDB** deploying to **AWS EC2**.
- Implemented **Kafka Streaming** for various processed events to store data in MongoDB and publish events to **ReactJS** dashboard.
- Designed and Trained deep **CNN** networks like **YOLO** on **AWS** servers using datasets like **COCO**, **MOT** and manually labelled data.
- Implemented object detection, tracking algorithms like **Deep SORT**, **YOLO** resulting in a **mAP of 0.85** using Data Augmentation.
- Developed location wise custom algorithms for Signal light detection using **LSTMs** giving an accuracy of 95%.
- Designed algorithm to estimate Train Speed for location tracking using ego-centric camera to avoid expensive LiDAR devices.

Barclays US | Senior Software Developer (BA4) | Pune, India. *Aug 2017 - Dec 2019*

⇒ **Push Notification Engine for Barclays US**

- Developed **Microservices** in **Java8** using **Spring Cloud Streams** to send Push, Email & Letter communications to ~10M customers.
- Implemented **Redis** for caching and **Kafka** for streaming events b/w services. Integrated services with **Consul** and **Vault**.

⇒ **Service Migration from Elastic VMs to OpenShift aPaaS – Containerization**

- Initiated **migration of ~450 services** from across Barclaycard US and delivered a **ReactJS** dashboard to aid developers in migration.
- Containerized** services for scalability by deploying to **OpenShift aPaaS** using **Jenkins CICD** achieving 0% downtime.
- Lead development of **Java plugins**, **archetypes** to automate code migration to new Platform **reducing ~7day/developer** efforts.

⇒ **Customer Correspondence Management Engine**

- Developed an engine with ~15 **Microservices** in **Java8** leveraging **Spring Cloud Streams** to generate Business card statements.
- Built a **Batch processing and monitoring tool** using **ReactJS (Redux)** for Business, **reducing manual efforts by ~80%**.
- Developed **PDF** and **AFP** statement templates using **Apache FOP**, **Thymeleaf** and Stored and retrieved them from **AWS S3**.

Indian Institute of Technology (IIT) - Bombay | Software Developer Inter | Mumbai, India *May 2015 - July 2015*

- Created an **open source MOOCs platform** like **edX** for ~3000 Indian Institutions using **Django-python** framework.

PROJECTS

Co-Founder, Student Portal VNIT, India | <http://studentportal.vnit.ac.in/> *Dec 2015 - Present*

- Founded an online portal using **Django-python** framework with ~4000 registered students, faculty members and alumni, to help connect students across university and share campus related activities, interview experiences, tech blogs and a lot more.
- Voluntarily leading the design and dev** with a team of 10 student developers adding new features to the portal.

Lead, Business Inventory Mobile Application, New Jersey *May 2020 – Jun 2020*

- Creating a **React Native (with Redux)** cross-platform mobile application for small businesses to manage product inventory.
- Lead a team of 3 developers to design and develop Database schema, **Rest APIs**, UI screens and deployed to **AWS EBS** and **RDS**.