GITHUB |LINKEDIN |RESEARCHGATE

EXPERIENCE

Edvora

Noida, IN

Chief Technology Officer

Jun'22 - Present

Email: ritikdsharma@gmail.com

Mobile: +91-7977280437

- Cross-team Development Management: Managed cross-team development, setup workflows and pipelines, documentations and technology operation procedures across the teams
- **Developed Modules**: Examination Portal, Classrooms, Timeline, Attendance, and Videoconferencing with Whiteboard
- **DevOps Pipeline**: Setup an efficient DevOps pipeline across the system with SOPs for testing, staging, and production environments
- Automatic Unit Testing: Set up automatic unit testing, bug reporting and bug solving pipeline, and testing evaluation procedures using Jira
- **Production Facilitation**: Facilitated production of the entire system, auto-scaling of clusters, horizontal scaling of pods, and load balancers
- **Deployment & Monitoring**: Wrote deployment procedures and testing scripts and monitored kubernetes pods and deployments, setting alerts for reporting any service issues

 $Tech \ Lead$ Jan'21 - Jun'22

- CI/CD Pipeline: Managed CI/CD pipeline deployment and management of frontend, backend, cloud services, and third-party services, and deployments through Docker and Kubernetes on Digital Ocean.
- Feature Control: Setup role and permission based engines for feature control at different access levels
- Videoconferencing: Utilized Agora SDK for videoconferencing and socket.io for real-time communication
- o **TechStack**: React.js, Next.js, Chakra UI, FastAPI, Redis, MongoDB, Digital Ocean, Kubernetes, Docker, Socket.io, Agora, Jira

GreenBord Mumbai, IN

Full-Stack Software Engineer

Feb'21 - Present

- **Software**: Working on full software package that consists of 3 native and 3 web-apps all connected to a common backend thus allowing the accessibility through browser, native, and web applications.
- o Tech Stack: MERN, React Native, JavaScript, Next.js, CSS3.

React Native Developer

Jan'21 - Feb'21

- Project: Education app involving courses, assignments, lectures, tests, user profile, attendance, and parent-view.
- Tech Stack: MongoDB, Express, React, Node.js, React Native, JavaScript, Next.js, CSS3.

University of Cambridge

Cambridge, UK

 $Development\ Intern$

Mar'20 - Sep'20

- Project Development: Developed three cross-platform applications and deployed the ML models on GCP
- Management: Managed application development and cloud teams to deploy the software for clinical trials in parallel collaboration with the ML team.
- o Frameworks: Used React-Native, Redux, Node Package Manager (NPM), and Flutter.
- **Technologies**: Firebase services and authentication, Firestore, Firebase storage, Cloud messaging, React Navigation, Audio-Video recording options, Node.js

Cloud Machine Learning & Full Stack Developer

May'20 - Jul'20

- **Project**: Predicting Anemeia among users by predicting the Vitamin D, Vitamin B-12, and Iron content from medical reports and images of the patients.
- Cloud Machine Learning: Performed image masking and classification on medical documents.
- Front-end: Created the entire application from scratch that involved functions like authentication, user profile, modification, uploading, and login APIs.
- Back-end: Performed user management on firebase with firestore and connected it with front-end

NGB Living Berlin, DE

Machine Learning Intern

Jun'20 - Sep'20

• Project: Designing an interactive chat assistant to automate the existing process for addressing customer queries.

- Dataset Creation: Dataset was created using FAQs and queries that the company received through emails.
- Model Creation: Built on TF-IDF vectorizers, GloVe Embeddings, Cosine Similarity, and Query Handler.
- o Model Deployment: Deployed the model on WordPress and Cloud-Run (GCP) server-less platform.
- o Tech Stack: HTML, CSS, JavaScript, Python, Flask, Cloud-Run (GCP), Git, Docker, gcloud-cli.

iPing Data Labs

Mumbai, IN

 $Machine\ Learning\ \mathcal{E}\ Computer\ Vision\ Intern$

Dec'19 - Feb'20

- **Project**: Automating quality assurance for industry workers while ensuring safety paraphernalia and smooth execution of the industrial processes using Computer Vision.
- Computer Vision: Performed object detection and logging time periods by deploying YOLO-V3 with transfer learning and fine tuning classifications for all layers of the network.
- Data Creation: Generated the data, scraped and tested for redundancy from the industrial video scenarios using Python v3.7 and Google Colaboratory.
- Machine Learning: Fine-tuned YOLO-V3 using pre-trained MS-COCO weights, modified for custom dataset.

Association of Computer Engineering Students

Mumbai, IN

Technical Advisor

Jun'19 - Aug'20

- Competitive Programming: Created a competitive programming environment in the college by organising several Hackathons and Webathons ranging for over 24-hours. Created CP problems for the hackathons.
- **Technical Workshops**: Organized events and workshops based on tools and technologies like C, C++, Python, Java, R, Swift, PHP, and NetBeans, depending upong the students' profile and requirements.
- Technical Festivals: Managed and organized technical festivals related to College and Department.

PUBLICATIONS

2020 Multimodal Depression Severity Prediction from medical bio-markers using Machine Learning Tools and Technologies (Cornell University Press)

SCHOLASTIC ACHIEVEMENTS

2019 Secured **First Rank** in an inter-departmental programming webathon among over 150 students involved in rigorous programming to create an application from scratch in 24 hours.

PROJECTS

- Performance testing using server-side-rendering: Developed and deployed a server-side rendered blog website using Next.js with Prisma and MySQL integration. Tested the website's server response and performance in contrast to static, universal, and client-side rendered websites based on server-response time, DOM loading and processing, speed index, time to first byte, and final interactive time.
- Multimodal Depression Severity Prediction: Developed a cross-platform smartphone application using React-Native, Redux, and Node Package Manager (NPM). Used over 20 JavaScript packages necessary for the User Interface (UI) components, Firebase, and Firestore services. Structured the back-end using GCP for authentication, and back-end management of user services. Used Cloud Firestore for user data storage using its client library for Python v3.7 and Node.js for database interactions. One database was dedicated to the user profiles of the patients and doctors while the other database comprised only of the results.
- Automatic Attendance Application: Automate the attendance system in classrooms using ML and Computer Vision. Tech stack included React-Native using the DaaS firebase, Python v3.7, TensorFlow, Keras. Classroom images uploaded on the application by class supervisor are processed by the model to get outputs. Dataset was stored on Firestore and App engine for deploying the application on GCP, and employed Google Buckets for storing run-time dataset storage.

EDUCATION

University of Mumbai

IND

Bachelor of Engineering | Department of Computer Engineering | GPA: 8.33

Aug'18 - May'22

SKILLS AND INTERESTS

Languages Python, JavaScript, TypeScript, Sass, C/C++

Tools FastAPI, React.js, Next.js, ChakraUI, TensorFlow, Socket.io, Docker, Agora, MobileNet

DB - Cloud Redis, MongoDB, AWS, Digital Oceans, Kubernetes