Aniket Ladukar

213-691-9685 | ladukar@usc.edu | www.linkedin.com/in/ladukaraniket | Los Angeles, CA

EDUCATION

University of Southern California **Jan 2023 – Dec 2024**
Master of Science in Computer Science | ***CGPA** - 3.71 / 4* *Los Angeles, CA*
Relevant Courses: Machine Learning, Analysis of Algorithms, Multimedia Systems Design, Database Systems, Deep Learning

Thakur College of Engineering and Technology, University of Mumbai **Aug 2016 – May 2020**
Bachelor of Engineering in Information Technology | ***CGPA** - 9.1 / 10* *Mumbai, India*
Relevant Courses: Data Structures, Analysis of Algorithms, Object Oriented Programming, DBMS

TECHNICAL SKILLS

Languages: Java, TypeScript, JavaScript, Python, C, SQL, HTML, CSS

Frameworks and Libraries: ReactJs, Spring Boot, ExpressJs, AngularJs, Protractor, CypressJs, Junit

Data Science / Machine Learning: scikit-learn, Tensorflow, NumPy, Pandas, Seaborn

Databases: MySQL, MongoDB, PostgreSQL

DevOps and Tools: Docker, Kubernetes, Jenkins, Git, AWS, LaTeX

WORK EXPERIENCE

Information Sciences Institute, USC **May 2023 – Present**
Frontend Engineer | *ReactJs, Protractor, Docker* *Marina Del Rey, Los Angeles*

- Incorporate support for array input fields to existing forms using react-beautiful-dnd, resulting in a remarkable **70% improvement** in **data ingestion efficiency** by avoiding creation of redundant records with only a few different fields and values, accelerating new record creation.
- **Migrate existing products** GUDMAP and Rebuilding a Kidney into a unified product Atlas D2K, resulting in a 30% improvement in user experience and a 40% increase in codebase efficiency.
- **Containerized test suite** using `docker` with support for headful testing to ensure **cross platform compatibility** and **eliminate** dependence on **third party services** in the CI pipeline resulting in **savings** of **$150** per month.

Infosys Ltd **Nov 2020 – Dec 2022**
Full Stack Developer | *ReactJs, Spring Boot, Docker, Kubernetes* *Mumbai, India*

- Designed and development a **Kubernetes Controller** in ***ReactJs and Java Spring Boot*** enabling seamless setting up of Kubernetes clusters and facilitating installation of an open-source cluster monitoring tool, resulting in a **60% reduction in roll-out period** and refined accessibility for non-technical users.
- Developed and rolled out authentication and cluster backend services with microservice architecture in Java to **improve availability and scalability** and ensure zero downtime.
- Augmented **Data Delivery Platform** with file support for CSV, XLSX, PDF, and Images, resulting in a 55% increase in parsing and previewing speed for larger files in ReactJs.
- Engineered a template based custom interactive form component in ReactJs using BlueprintJS with CRUD support, promoting code reusability and developer-friendly form rendering **reducing development time** for forms by roughly **90%**.
- Created workflows to **containerize** UI and backend microservices using `docker` and `docker-compose` to catalyze a **reduction** in build and deploy time by **80%**.
- Streamlined client's product suite by creating a highly efficient **Single Sign On Service**, enabling seamless authentication and authorization, drastically **reducing administrative overheads** by 45% by simplifying user management and access control.
- Integrated products with the SSO, leading to a remarkable **70% reduction** in user onboarding time along with license based product switching.

PROJECTS & PUBLICATIONS

Video Indexing and Searching | *Graduate Course Project* | *Java, JavaFX, MongoDB*

- Implemented Constellation Mapping for Audio Spectrogram and Shot Detection in Java for video content indexing.
- Achieved an average search time of **100ms**, inclusive of hashing and query searching surpassing **expected** benchmark of **1s**.

Music Generation Using Deep Learning | *Undergraduate Project* | *Python, Tensorflow*

- Studied various models for sequence generation such as LSTM, Transformers, AutoEncoders and looked into feasibility of models employing GANs to generate coherent audio sequences resulting in a 10% improvement in sequence accuracy.
- Designed a hybrid model using AutoEncoder and GAN to improve long term and short term coherence of generated audio sequences along with 20% reduction in resource requirement and published findings in IEEE ICCDW in Feb 2020. **ISBN:**978-1-7281-4635-5.

Taste Tracker - Restaurant Review | *Independent Project* | *ReactJS, ExpressJS, MongoDB*

- Multiple restaurants are listed along with all food offerings and chef details. Restaurants can be sorted by location, cuisine, average cost per meal. Each restaurant has an individual blog section for latest updates about each place.
- Customers can leave comments and ratings for a particular dish, restaurant ambiance and service quality.

EXTRACURRICULAR

Intercollegiate Archery Team | *University of Southern California* | *Olympic Recurve Men* **Sept 2023 - Present**
Association for Computing Machinery | *Student Body* | *Chairperson* **Aug 2018 - Mar 2019**
Indian Society For Technical Education | *Student Body* | *Creative Head* **Aug 2017 - Mar 2018**
Extension Work Team | *Community Service* | *Volunteer* **Aug 2017 - Mar 2018**