

YUGAL KHANTER

khanter@usc.edu | [PORTFOLIO](#) | [LINKEDIN](#) | [LEETCODE](#) | [GITHUB](#) | Los Angeles, CA

EDUCATION

Master of Science in Computer Science

University of Southern California, Los Angeles, CA

Aug 2024 – May 2026

Bachelor of Engineering, Computer Science,

Savitribai Phule Pune University, Pune, MH

Jan 2021 – May 2024

CGPA – 9.05

WORK EXPERIENCE

Research Intern | Research Work

Aug 2023 – Feb 2024

- Conducted in-depth research on Applications of Generative Adversarial Networks (GANs) for auto-design patient-specific implants for Cranial defects on the MUG500+ dataset.
- Implemented Image Registration on the base dataset that contained 31 defect skull images and their respective implants and augmented the dataset to 950+ defect skulls and implants to train the network well.

Worked on – Python, TensorFlow, Keras, Nearly Raw Raster Data (NRRD), ANTs Image Registration

Software Developer Intern | Pointsix.org

Sept. 2022 – May 2023

- Architected and optimized a React.js-driven NFT trading platform, enabling seamless exploration and transactions improvements increased daily active users by 25%.
- Collaborated with stakeholders and design team to propose and execute strategies that led to 20,000+ registered users for the waitlist in the 1st month of the launch.
- Developed and implemented RESTful APIs to streamline data flow between front-end and back-end systems, resulting in a 40% reduction in response time and improved overall system performance.
- Wrote, tested, and deployed smart contracts to mint, list, and buy NFTs for 2 blockchain ecosystems.

Worked on – React.js, Node.js, Express.js, Tailwind CSS, MongoDB, Postman, Solidity, Hardhat, Ethers.js

PUBLICATIONS

- D. Oswal, Y. Khanter, Dr. P. Mahalle (2024), **Volumetric Images of Patient Specific Implants for Cranial Defects**, Mendeley Data, V1, doi: [10.17632/ywnjr7gnty.1](https://doi.org/10.17632/ywnjr7gnty.1)

PROJECTS

[Ecommerce App](#)

- Engineered a full-stack e-commerce platform using MERN stack, enabling seamless online shopping with functionalities for browsing, cart management, and wishlist operations.
- Implemented secure authentication and authorization using Passport.js and JWT tokens, ensuring safe and personalized user experiences across the platform.
- Built a comprehensive admin panel enabling product management (CRUD) and order status tracking.
- Incorporated Razorpay payment gateway that supports 3+ payment methods to facilitate secure and reliable payment processing during checkout.

[New York Taxi Fare prediction](#)

- Created a ML model for Taxi fare prediction in New York City, initially achieving an RMSE loss value of \$9.77 using Simple Linear Regression.
- Improved model accuracy by 80% through thorough data processing steps like feature engineering, outlier removal, and data validation.
- Tested two advanced regression models - Ridge Regression and Random Forest, resulting in better predictions with RMSE of \$5.24 with an accuracy of 70.59% for Ridge Regression and RMSE of \$3.65 with an accuracy of 85.73% Random Forest model.

[BookMyTour](#)

- Built a website for users to explore and book tours using Pug templates in Node.js
- Constructed back-end system utilizing Node.js, Express.js, and MongoDB Atlas to store data and created RESTful APIs to efficiently handle data and implemented authorization, and authentication functionalities leveraging JWT.
- Integrated Stripe checkout and payments to securely complete the checkout

TECHNICAL SKILLS

Languages – C, C++, JavaScript, Python, Solidity

Web – React.js, Redux-Toolkit, Node.js, Express.js, Tailwind CSS

AI/ML – Pandas, Sk Learn, Keras, TensorFlow, Pytorch

Database & Tools – MongoDB, MySQL, Git, GitHub, Postman, JupyterLab, GoogleColab

CERTIFICATES & LICENCES

[Machine Learning Specialization](#) | [Node.js, Express.js, MongoDB & More](#) | [Ethereum & Solidity](#)

EXTRA CURRICULARS, VOLUNTEERING AND OTHER EXPERIENCES

- Website Coordinator Director of Rotaract Club of Pune Camp Next Gen for RIY 2022-2023
- Teaching Assistant (11th-12th Physics/Mathematics) – Coherence Academy (Dec 2021 – Feb 2022)