

RAJ SHAH

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EDUCATION

Masters in Computer Science, Stevens Institute of Technology, NJ
B.E Information Technology, University of Mumbai, Mumbai, India

Jan 2021- Dec 2022
Aug 2016- June 2020

SKILLS

Languages : Python, Javascript, Java
Web Technologies : HTML5, CSS3, WordPress, Node.js
Databases : MS SQL, MongoDB, PostgreSQL
Programming Environments : Visual Studio Code, Jupyter, Python IDLE, Google Colab, PyCharm, Postico
ML Tools : NumPy, Pandas, OpenCV, SpaCy, TensorFlow, Matplotlib, Scikit-Learn, Keras, NLTK
Tools & Frameworks : AWS, Git, Gitlab, Django, Bootstrap, ReactJS(Beginner)

PROFESSIONAL EXPERIENCE

Software Engineer | Apkudo Inc | Dallas ,Texas

Jan 2023- June 2023

- Developed and maintained Python API endpoints, enhancing seamless integration between front end and backend systems. Implemented robust error handling and authentication mechanisms for optimal security and reliability
- Optimized database schemas using PostgreSQL, resulting in substantial query performance improvement and enhanced scalability
- Collaborated with cross-functional teams to gather requirements and implement new features, leveraging Python and PostgreSQL. Actively participated in code reviews, offering valuable feedback and contributing to code enhancements
- Conducted comprehensive testing and debugging of Python API endpoints, ensuring functionality and maintaining code integrity. Monitored application performance using advanced logging and profiling techniques

Software Engineer | XPF Solutions | Mumbai, India

Jan 2018- Dec 2019

- Developed and maintained front-end components using HTML, CSS, Javascript to create user friendly and aesthetically pleasing websites and web application
- Fixed bugs from existing websites and implemented enhancements that significantly improved web functionality
- Collaborated and coordinated with cross-functional teams to gather requirements for designing and developing layouts for client websites
- Worked closely with backend developers to integrate front end interfaces with RESTful APIs, enabling seamless data exchange
- Utilized version control system (Git) to manage and track code changes, enabling streamlined code management

ACADEMIC PROJECTS

Hospital Management System

- Led a team of 4 in developing a robust Hospital Management web application using MERN stack
- Successfully implemented features such as patient registration, appointment booking, doctor availability tracking and room management
- Designed and deployed a RESTful API using Node, Express and MongoDB providing efficient data flow to the front end
- Leveraged React.js resources including Context API, React Hooks, and React Router for dynamic and interactive frontend elements

Green Cart

- Spearheaded the development of an online plant sales platform using Node.js, MongoDB, Express.js, Handlebars, and jQuery in a collaborative team of three members
- Designed and implemented the dynamic database module, enhancing the platform's responsiveness and functionality
- Elevated user engagement by skillfully employing client-side scripting to manipulate the HTML DOM for actions like liking, commenting
- Assumed project management responsibilities, overseeing code integration and conducting comprehensive code reviews

Capture Parking:

- Pioneered the creation of a sophisticated parking monitoring system, harnessing historical data and CCTV images to forecast real-time parking space availability
- Applied advanced data mining techniques to predict parking availability, identifying optimal parking locations for enhanced efficiency
- Expertly utilized computer vision techniques, including Mask R-CNN, for image analysis to determine parking space status
- Acknowledged for contributions with publication of a technical paper in S-JPSET Journal 20 May 2020 Vol.12 Issue1 (ISSN-2454-5767) [\[Link\]](#)

PERSONAL PROJECTS

Broadband Service Provider (MongoDB, React, CSS, JS libraries):

Devised a comprehensive web application catering to a broadband service provider's need, adeptly managing plans and user subscription. Demonstrated proficiency in backend functionality through MongoDB integration and frontend development utilizing React, CSS and Javascript

Taxi Demand Prediction In New York City (Machine Learning, K-means, SageMaker) :

Developed an innovative machine learning system to predict taxi demand within specific areas of New York City. Implemented K-means clustering for spatial analysis and deployed the model using SageMaker. Utilized Feature Engineering techniques to optimize model performance

CERTIFICATION

ONGOING Front – End Developer Professional Certificate from META