

Prayag Parikh

📍 Dallas, Texas | ✉️ prayagparikh1508@gmail.com | 📞 360-919-7964 | 🌐 GitHub | 🔗 LinkedIn

SKILLS

Area of Interest: Software Engineer, Machine Learning, Computer Vision, AI

Programming Languages: Python, JavaScript, Java, [SQL](#), C++, Unix(Shell) Programming

Frameworks & Technologies: NodeJS, React, HTML, CSS, RESTful APIs, Apache Spark, Flask, Spring Boot, Deep Learning

Databases & Cloud: MySQL, PostgreSQL, MongoDB, AWS (Lambda, S3), Azure

DevOps & Testing Tools: GitHub, Docker, Kubernetes, Jira, Rally, Jenkins, Terraform, Unit Testing (Postman, Jest)

WORK EXPERIENCE

- The University of Texas at Arlington (UTA)** Arlington, Texas
Graduate Teaching Assistant (GTA) Aug 2023 - May 2024
 - Database Systems:** Mentored 70+ students in **SQL project** planning, designing, and implementation, providing tutoring and feedback.
 - Discrete Structures:** Assisted 60 students in learning math concepts through conducting office hours, grading, & responding questions.
- Tata Consultancy Services (TCS)** Hyderabad, India
Software Developer Aug 2020 - Aug 2022

RESTful APIs - design, development, code debugging, unit testing, and AWS deployment

 - Designed and implemented** 6 new RESTful API services for data migration between PostgreSQL and Oracle databases using Node.js for GE Power. This work supported the data engineers and contributed to approximately 20% increase in their next year's revenue.
 - Implemented **unit tests** using the Jest library throughout all stages of the SDLC as part of the Test-Driven Development (TDD) methodology, and utilized Postman to verify the expected functionality of API endpoints, ensuring reliable module delivery.
 - Analyzed and optimized** legacy jQuery and AJAX code to modern JavaScript (ES6) across website pages and troubleshooting glitches through DOM event handling, resulting in a 25% reduction in website load time.
 - Deployed and scheduled** node.js scripts on AWS Lambda and integrated with AWS API Gateway to handle real-time HTTP calls efficiently in the production environment, saving 150 person-hours to meet targeted delivery deadline.

Python Data Visualization, and Interactive UI using React

 - Generated data visualization charts using Python libraries such as Matplotlib and Pandas, along with SQL queries, to enhance data analysis capabilities and facilitate Tableau dashboard creation.
 - Developed a React-powered real-time data monitoring dashboard with 2 developers for an aerospace company, accelerating data visualization speed by 40% and facilitating data-driven decision-making.

Customer first, Agile SDLC, and Code reviews

 - Contributed to Agile sprint planning** using Rally & Jira, fostering cross-functional collaboration to address issues & code reviews on Github, among 7-member team. **Interacted directly with client** team on daily basis to adapt changing business and technical requirements.

EDUCATION

- The University of Texas at Arlington (UTA)** Arlington, Texas
Master of Science in Computer Science; GPA: 3.77 Aug 2022 - May 2024
 - Relevant Coursework:** Software Engineering, Design & Analysis of Algorithms, **Computer Networks**, Computer Vision, Machine Learning, Cloud Computing, Data Mining, AI, Neural Networks, Python Programming
- Gujarat Technological University (GTU)** Ahmedabad, India
Bachelor of Engineering in Information Technology; GPA: 3.68 (9.00/10.0) Aug 2016 - July 2020

PROJECTS

- Python | Computer Vision | ML: OpenAI - Generated stories from Celebrity faces ([Demo](#) | [Paper](#))**
Tech stack: Python, Flask, MTCNN, Haar Cascade, FaceNet, VGGFace2, SVM, KNN, GenAI (OpenAI GPT)
 - Introduced a unique **Flask** web app integrating MTCNN, Haar Cascade, & FaceNet for historical celebrity face recognition, coupled with OpenAI-generated stories. Achieved a 96% test accuracy with the trained model of over 13,000 LFW images.
- E-Commerce Platform - Online Shopping WebApp using Node.js & MongoDB**
Tech stack: JavaScript, Node, ExpressJS, REST APIs, MongoDB, EJS(Pug), MVC Architecture
 - Engineered a scalable e-commerce platform for buyers and sellers with MVC architecture, enabling seamless user authentication, cart management, secure payments, and intuitive admin product control.
- Chatroom & Live Geolocation Sharing Web application using Node.js ([Website](#) | [GitHub](#))**
Tech stack: JavaScript, Node.js, Socket.io, HTML, CSS, ExpressJS, NPM libraries
 - Built a full-stack chatroom web application with live location sharing as a project for the Computer Networks class at UTA. Recognized as the top project among 60+ student submissions by the professor.
- Python | Computer Vision: Diverse Computer Vision Projects ([GitHub](#))**
Concepts: Canny/Sobel/Prewitt edge detection, Hough transform, Eigenfaces, PCA reconstruction, SIFT detector, k-NN
 - Employed diverse CV concepts including Circle, Lines, and Edge detection techniques, Eigenfaces & PCA reconstruction on 25 images, and panorama image stitching using SIFT descriptors, inspired from a research paper.