Dixit Parkhiya | Software Engineer

With an MTech in Computer Science from **IIT Madras** and 1 year of hands-on experience in web technology, I am eager to contribute as a Software Developer. My expertise lies in crafting innovative and scalable software solutions that help elevate company reputation and deliver impactful results.

Education

| Program | Institution/Board | %/CGPA | Year |
|------------------------------------|--|--------|------|
| M.Tech. (Computer Science & Engg.) | Indian Institute of Technology Madras | 7.51 | 2023 |
| B.Tech. (Computer Science & Engg.) | Indus University, Ahmedabad, (Gujarat) | 9.43 | 2020 |
| 12th (Senior Secondary Education) | Gujarat Secondary Education Board | 81.6% | 2016 |
| 10th (Secondary Education) | Gujarat Higher Secondary Education Board | 82.0% | 2014 |

Work Experience

1. Associate Engineer

Crayon Data (Chennai)

Aug 2023 - Present

- Contributed to the development and delivery of dynamic, user-friendly interfaces for the online platforms of prominent banking institutions like HSBC.
- Transformed a website previously built on ReactJS into NextJS, improving its performance and scalability by 20%.
- Played a key role in the development and success of the "Demo Portal" project, built on NextJS, supporting the company's strategic objectives.
- Developed the 'DaaS Dashboard,' leveraging NextJS and Tailwind CSS for frontend, and FastAPI for backend development.
- Technologies Used: NextJS, ReactJS, FastAPI, MySQL, TailwindCSS, MaterialUI, ShadCN

Key Projects

1. Secure Application on Genode OS

M.Tech - Final Year Project / Guide: Dr. Chester Rebeiro

June 2022 - July 2023

- Developed a secure cryptographic wallet using the **Genode** OS framework.
- Ported Genode OS for compatibility with ARM and x86 processors.
- Enabled Java support on Genode OS, integrating the **javax.crypto** library for cryptographic operations.
- Built and released an application on Genode OS using the **GOA** tool.
- Technologies Used: C/C++, Genode, Sculpt OS, Docker, Qemu, Java, javax.crypto, GOA tool

2. Healthcare Web Portal

Jan 2020 - May 2020

B. Tech - Final Year Project / Guide: Prof. Khushbu Maurya

- Developed a Web portal for E-HealthCare system using Aadhaar card for patient access, replacing traditional file systems.
- Developed the web portal using the **Django** framework.
- o Technologies Used: HTML, CSS, JavaScript, Bootstrap, Django

3. Restaurant Review App

May 2018 - June 2018

B. Tech - Final Year Project / Guide: Prof. Khushbu Maurya

- Awarded the Udacity "Mobile Web Specialist Nanodegree" through the Google India Scholarship Program.
- Developed a restaurant review portal featuring menu, timings, and location.
- Converted the website to a Progressive Web App (PWA) for improved reliability.

Course Projects

1. PRML Data Contest

Jul-Nov 2021

Prof. Balaraman Ravindran. Team Size: 2

Pattern Recognition and Machine Learning

- Build supervised models to predict each of the six clinical descriptors using gene expression data of patients with neurodegenerative diseases..
- Implemented Algorithms: Decision Tree, Adaboost, randomForest.

Online Courses

- Generative AI Courses [Coursera]
 - Generative AI for Everyone (Andrew Ng)
 - o Al Apps with ChatGPT, Dall-E, and GPT-4
 - JavaScript RAG Web Apps with LlamaIndex
 - Automated Reasoning with GPT Assistant API: ReAct Agents
- Deep Learning(CS7015) by Mitesh Khapra youtube/nptel
- Mobile Web Specialist Nanodegree (Udacity)
- Data Engineering Essentials using SQL, Python, and PySpark (Udemy)
- Building Real-Time REST APIs with Java Spring Boot (Udemy)

Technical Skills

- Programming Languages: C, C++, Python, JavaScript, TypeScript, SQL, Java
- Frontend Technologies: ReactJS, NextJS, PWA, Tailwind CSS, Material UI
- o Backend Technologies: FastAPI, Django, Spring Boot, NodeJS
- o DevOps: Docker, Kubernetes, Qemu
- o Cryptography: javax.crypto, Genode OS, ARM, x86 processors
- Machine Learning: Decision Trees, Adaboost, Random Forest, Python (Pandas, NumPy)
- API Development: RESTful APIs
- Database Technologies: SQL, PostgreSQL, MongoDB
- Version Control: Git (GitHub, GitLab, Bitbucket)

Achievements

- Secured All India Rank 174 in GATE CSE 2021, among 1 lakh students.
- Solved 800+ data structure and algorithm challenges on LeetCode, demonstrating strong problem-solving skills.

Positions of Responsibility

- Teaching Assistant, CSE Department, IIT Madras (July 2022 June 2023)
 - Secure Systems Engineering (Jan 2023 June 2023)
 - CAD for VLSI course (July 2022 Dec 2022)
 - o Discrete Mathematics for Computer Science (Jan 2022 May 2022)