Pratik Desai

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OBJECTIVE

Software Engineer with 1+ years of experience in Full Stack Web Development using technologies like Java, Spring Boot, Flask, React.js, and Next.js **seeking full-time Software Engineer roles**.

EDUCATION

Texas A&M University — College Station, TX
Master of Computer Science (GPA: 4.0) — *Aug 2023 – May 2025*

College of Engineering Pune — Pune, India
Bachelor of Technology (B. Tech) in Computer Engineering (CGPA: 8.56/10) — *Aug 2018 – May 2022*

EXPERIENCE

Student Research Assistant — Jun 2024 – Present
Texas A&M University — *College Station, TX*

- Leading the development of the OliviaKIDS website using **Next.js**, **React.js**, **TypeScript**, Tailwind CSS, Zod, and Zustand, resulting in effective coordination of a cross-functional team and a robust educational platform.
- Building a scalable backend infrastructure with **Prisma** and **PostgreSQL**, resulting in efficient data management and streamlined data handling.
- Enhancing development and deployment consistency by leveraging **Docker** for containerization, resulting in seamless deployment processes and reliable development environments.

Software Engineer — Jul 2022 – Jul 2023
Nuance Communications - A Microsoft Company — *Pune, India*

- Led the development and optimization of a key application feature using **Java**, **JavaScript**, and **PostgreSQL**, resulting in a **20% improvement** in user experience.
- Implemented microservices architecture, leveraging cloud technologies, **reducing deployment time by 16%** and enhancing system reliability.
- Spearheaded the design and implementation of a feature flag service, utilizing **Spring Boot**, **PostgreSQL**, and **cloud infrastructure**, enabling faster feature rollouts and improved application scalability.

Software Engineering Intern — Jun 2021 – Aug 2021
Nuance Communications - A Microsoft Company — *Pune, India*

- Optimized data storage efficiency, achieving a **30% reduction** in usage through strategic optimization methods using **PostgreSQL** on cloud infrastructure.
- Led internationalization efforts, enabling support for multiple languages and expanding application reach using cloud-based solutions.
- Migrated legacy components for Microsoft, resulting in a **23% reduction** in system latency.

PROJECTS

StackSense | *Flask, React, BERT, TensorFlow, LLM, Generative AI*

- Developed a fine-tuned BERT tag prediction model, boosting F1-score from 0.548 to 0.567, and implemented KNN collaborative filtering with Universal Sentence Encoder for faster, more accurate tag suggestions and question recommendations on StackOverflow.

WhatsNxt | *JavaScript, Node.js, React.js, SQL, REST API, Python, Flask, Tensorflow, Machine Learning*

- Engineered multifunctional Chrome extension compatible across **5+ social media platforms**, elevating user engagement.
- Delivered features such as personalized auto-completion, auto-response, word correction, prediction, and emotion analysis with an average model accuracy of 93%.
- Engineered an auto-calendar link generation feature by improving an existing library, enhancing user productivity.
- Led a cross-functional team in the development and successful implementation of the project, demonstrating strong communication and organizational abilities while ensuring alignment with project objectives and timelines.

Employee Management System | *Spring Boot, RestfulAPI, PostgreSQL, Spring Cloud, React.js, Node.js*

- Designed and developed core **Microservices** for Employee Management System, encompassing Employee, Payroll, and Attendance functionalities.
- Implemented a notification service utilizing **Twilio** for messaging and **RabbitMQ** for message queuing.

Course Evaluation Summarizer | *Ruby on Rails, ChatGPT API, React.js, PostgreSQL*
- Automated and accelerated analysis of customer evaluation forms through a web application.
- Achieved key milestones: user-friendly interface, **Google OAuth** login, and **PostgreSQL** database setup.
- Enhanced system with AI-driven processing, improved testing, and stability for efficient analysis tool.

Technical Skills

Languages: Java, Python, JavaScript, TypeScript, Ruby on Rails, C, C++, SQL, HTML/CSS
Frameworks: Spring Boot, Spring Cloud, Spring MVC, React, Next.js, Node.js, React Redux, Flask, FastAPI, Tailwind, Zustand
Databases: MySQL, NoSQL, MongoDB, PostgreSQL, Redis, Firebase
Developer Tools: Git, GitLab, GitHub, Maven, Gradle, Docker, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, PowerShell
Other: AWS, Azure