Prachi Kotadia

Chicago, USA | +1 (708) 825-5618 | iprachikotadia@gmail.com | Linkedin | Portfolio | Github

Education

Illinois Institute of Technology, Chicago, USA — Aug 2023 - May 2025
Master's in Computer Science

Charotar University of Science and Technology, India — Aug 2019 - May 2023
Bachelor of Technology in Electronics and Communication Engineering

Technical Skills

Programming: Python, JavaScript, Typescript, Dart, C/C++, SQL, Shell Scripting, HTML, CSS, Node.js
Databases: PostgreSQL, AWS DynamoDB, MySQL, MongoDB
Web Development: HTML5/CSS3, React, Authentication & Security (JWT, OAuth2), WebSockets
Cloud: Kubernetes, Docker, CI/CD, Monitoring & Logging, Microservices & Event-Driven Architecture, AWS Lambda, S3, API Gateway
Development Tools: Git/GitHub, Postman, Swagger/OpenAPI, Vite
Mobile Development: Flutter, Progressive Web Apps (PWA), Animations & UX, Responsive Mobile Design, React Native
ML/AI: OpenAI API, LangChain (LLMs & AI services), NLP (chatbots, text processing), TensorFlow

Experience

Software Engineer — Aug 2025 - Present
GroupedIn, New Jersey, USA

- Built a cross-platform app for community and e-commerce, connecting users and enabling transactions.
- Added AI chat and recommendations to help users discover relevant content, boosting engagement by 25%.
- Implemented real-time notifications, event updates, and user analytics, improving engagement and retention.
- Optimized backend APIs and database queries to ensure fast, reliable performance across web and mobile platforms.

Research Assistant – Microservices Benchmarking — Feb 2025 - May 2025
Illinois Institute of Technology, Chicago, USA

- Benchmarked microservices in 5+ languages (Python, Go, Rust, Java, Node.js), analyzing runtime, memory.
- Migrated services to Rust/Go, reducing memory usage by 35% via system-level tuning and concurrency models.
- Improved throughput by 30% with async refactoring and load testing, validated using JMeter, Locust.
- Published comparative study providing cross-language performance insights for distributed systems.

Software Engineer — Jun 2024 - Dec 2024
GroupedIn, New Jersey, USA

- Built secure JWT Authentication and REST APIs, ensuring compliance with modern security standards (OAuth2, HTTPS).
- Reduced React web app load time from 2.1s to 1.4s via code splitting, asset preloading, and caching.
- Built 15+ reusable React components and added Redux, improving feature delivery speed by 25%.
- Boosted user engagement by 30%, increasing session duration from 4.5 to 6 minutes through UX redesign.

Projects

OmniLife – AI Personal Platform: Finance, Fitness, Travel, Chat & E-commerce — Jul 2025 - Present

- Built an AI-driven platform integrating GPT-4 and LangChain for expense forecasting, fitness insights, travel planning, and e-commerce, ensuring high reliability and seamless performance through Dockerized cloud infrastructure.
- Implemented real-time WebSocket chat, live sync, and AI commands for budgets, workouts, and shopping.
- Developed microservices with PostgreSQL, Redis, JWT/OAuth2, deployed on cloud using Docker.
- Created AI recommendation engine with LangChain, achieving 85–92% predictive accuracy.
- Designed responsive UI/UX with TailwindCSS, Framer Motion, Recharts visualizations, and PWA offline support.

BattleshipApp – Cross-Platform Multiplayer Strategy Game — Jan 2024 - Feb 2024

- Built a Battleship game app using Flutter and Dart, deployed on Android, iOS, Web, and Desktop from a single codebase.
- Built a robust authentication system using JWT with session persistence, token refresh, and logout handling, ensuring strong security and seamless user experience across devices.
- Designed and developed real-time multiplayer gameplay with RESTful API integration, managing 5x5 game boards, 5 ships per player, and multiple AI difficulty levels.
- Delivered a responsive, Material Design-compliant UI with interactive grids, dynamic scaling, and smooth async handling, ensuring seamless gameplay across 6 platforms.

High-Performance Database Indexing Framework — Sep 2024 - Oct 2024

- Built a B+ Tree Index Manager in C with 2,500+ LOC, achieving 100% test success rate across 50,000+ operations.
- Designed a multi-layered architecture (Storage, Buffer, B+ Tree, Record Managers) ensuring modularity, scalability, and extensibility.
- Implemented 5 buffer replacement strategies (FIFO, LRU, CLOCK, LFU, LRU-K) optimizing memory usage and I/O performance.
- Achieved O(log n) efficiency for search, insert, and delete operations with zero memory leaks and <1MB runtime memory usage.

Certificates

- Google: Crash Course on Python, UI/UX Design, Technical Support Fundamentals, Foundations: Data, Data, Everywhere
- Amazon: DynamoDB Service