

PRABIN SHRESTHA

Software Engineering Student | Backend & Full-Stack Developer

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PrabinShrestha0716

Bedford, TX

HIGHLIGHTED PROJECTS

Cache-Aware REST API

Node.js, Express, PostgreSQL, Redis, Docker

March 2026

- Built a high-performance backend API with Redis-based caching layer to reduce database load and improved response time by ~30-40%.
- Implement cache-aside strategy with TTL-based expiration for frequently accessed endpoints.
- Designed cache invalidation mechanisms on create, update, and delete operations to maintain data consistency.
- Measuring cache hit/miss rates and response time improvements to analyze performance gains.

Realtime Collaborative Notes Platform

React, Node.js, Express, Socket.IO, MongoDB

Jan 21, 2026

- Built a multi-user collaborative notes application supporting real-time document editing and live synchronization.
- Implemented WebSocket communication using Socket.IO to broadcast state updates across concurrent clients.
- Designed REST APIs for document management, authentication, and user session handling.
- Applied optimistic UI updates and basic conflict-handling strategies for concurrent editing scenarios.

AI PR Reviewer

Node.js, TypeScript, Probot, GitHub API, OpenAI

Jan 2026

- Built a GitHub App that listens to pull-request webhook events and performs automated AI-assisted code reviews.
- Integrated GitHub REST APIs to fetch PR files, parse diffs, and analyze code modifications programmatically.
- Implemented structured review outputs (risk level, issue summaries, test recommendations) with fallback handling for API limits.

Student Success Platform

React, Node.js, Express, PostgreSQL

Oct 2025

- Developed a full-stack web platform supporting digital library access and personalized academic scheduling.
- Designed RESTful APIs using Express.js to manage users, resources, and schedules.
- Modeled relational schemas in PostgreSQL and implemented optimized CRUD operations.
- Built responsive frontend interfaces using React for improved user interaction and usability.

SKILLS

Languages:

JavaScript (ES6+), TypeScript

Frontend:

React, HTML, CSS

Backend:

Node.js, Express, REST APIs

Databases:

PostgreSQL, MongoDB, Redis

Cloud / DevOps:

Docker, AWS (EC2, S3), Deployment

Tools:

Git, GitHub, Socket.IO

EDUCATION

B.S. in Software Engineering

University of Texas at Arlington

Expected May 2026 Arlington, TX

GPA: 3.8

Associate in Science

Dallas College

Dec 2023 Irving, TX

GPA: 3.75

EXPERIENCE

Exception Process Specialist

Assurant

Feb 2024 - Present Lewisville, TX

- Diagnose and resolve shipping and fulfillment discrepancies, improving order accuracy and operational throughput.
- Analyzed recurring operational bottlenecks and implemented corrective process improvements.

Production Supervisor

Samsung (FTW)

May 2019 - Jan 2024 Coppell, TX

- Led day-to-day production operations and coordinated cross-shift teams to maintain quality and delivery standards.
- Improved operational efficiency through structured task allocation and process monitoring.