Parkhi Rastogi

Email: <u>parkhi.1420@gmail.com</u> Phone: +91 9910270550

Companies worked at:

- Microsoft India Outlook Development team (Senior Software Engineer)
- Cadence Incisive Formal Verifier tool (Lead Software Engineer)
- Oracle Enterprise One ERP product

Education

UG: Computer Science and Engineering from NIT Allahabad: 8.51/10

Intermediate Education: from CBSE: 93.8% Secondary Education: from CBSE: 91.8%

Summary

Senior Software Engineer with over 10 years of experience in C++, python, backend development, and system integration—delivering robust solutions at Microsoft, Cadence, and Oracle. As a freelancer, developed secure and scalable backends using FastAPI (for a private crypto data platform) and NestJS with Kafka (for a healthcare data pipeline). Experience includes Redis caching, PostgreSQL and MongoDB design, Docker-based deployment, and background job orchestration. Adept at modernizing legacy systems, quickly adapting to new stacks, and producing high-quality documentation to support developer clarity and onboarding.

Freelance Backend Developer (2024 – Present)

C++ Backend & API Development (Client: Kolomolo)

- Developed a C++ wrapper for SD card data extraction using the OSCAR codebase, supporting multiple CPAP machine formats.
- Designed MongoDB schemas to store extracted device data efficiently.
- Built REST APIs using NestJS to serve session and daily statistics data to frontend clients.
- Integrated Kafka for message-based communication and built services to parse and ingest data.
- Authored clear technical documentation for backend logic, API usage, and deployment steps as part of the project deliverables.

FastAPI Backend – Crypto Data Platform (Client: Cryptocurrency Academie)

- Built a production-grade FastAPI backend integrating CoinGecko and CryptoQuant APIs with Redis caching and PostgreSQL.
- Designed background workers (APScheduler) for periodic data ingestion and implemented rate-limited REST endpoints.
- Delivered Dockerized setup, admin log export (CSV/JSON), and dev/prod environment configuration.
- Supported staging and go-live deployment; wrote unit tests and aligned endpoint behavior across Redis and DB sources.

Microsoft India – Senior Software Engineer (2018 – 2023)

Outlook Desktop and Web Team

- Developed and enhanced features in Outlook's legacy desktop client, including the Store, Classic Message List, and Security modules.
- Ensured data consistency and handled API integrations using EWS and REST; focused on optimizing performance.
- Supported Outlook Web with contributions in React & JavaScript for admin features.

Cadence Design Systems – Lead Software Engineer (2014 – 2017)

Formal Verification Tools (IFV, Jasper Integration)

- Designed and implemented C++/JNI features for Jasper Gold and Assertion Writer.
- Drove successful integration of acquired tools into the IFV ecosystem.

Oracle India – Software Engineer (2011 – 2014)

JD Edwards ERP (Homebuilder, Real Estate)

- Maintained and enhanced two modules in JD Edwards ERP, working on a C++ thick client stack.
- Authored internal documentation to streamline maintenance and improve support efficiency.

Technical Skills

- Languages: C, C++, JavaScript, TypeScript (NestJS), React (Basic), Python (Beginner)
- Backend: REST APIs, MongoDB, Kafka, EWS, Postgresql, FastAPI, Dockerization, APSScheduler Background Workers, Authentication

- Tools: Visual Studio, Postman, Fiddler, Git, Draw.io, MFC/MAPI, MySQL
- Platforms: Linux, Windows

Certifications & Achievements

- AIR 1420 in AIEEE (Top 1% among 500,000+ candidates)
- Finalist in national-level tech competitions (Avishkar 2009, Softathlon, etc.)
- Published IEEE research on data structures (Bit Tuple Tree for indexing)