Ronit Khanna

+1-480-760-3152 | ronitkhanna2004@gmail.com | linkedin.com/in/ronitkhanna | github.com/Ronn0905

Education

Arizona State University — **Tempe, Arizona**
Bachelor of Science in Computer Science – ***GPA: 3.9/4.0*** — *Aug 2022 – May 2026*

Experience

Java Developer Intern — **Jun 2025 – Aug 2025**
Indiabulls Securities — *Gurugram, India*

- Developed Spring Boot microservices handling 5K+ daily transactions with connection pooling and caching, reducing processing time by ∼30%
- Refactored REST APIs optimizing database queries and indexing to reduce response time from 500ms to 375ms
- Implemented CI/CD pipelines with automated testing in Agile sprints, reducing deployment time by ∼20%

Graduate Service Assistant – CSE310 (Data Structures) — **Aug 2024 – Dec 2024**
Arizona State University — *Tempe, Arizona*

- Mentored 100+ students in Java algorithm design and complexity analysis, improving average scores by 15%
- Created quizzes and evaluated projects, reducing grading turnaround time by 25-30%

Cybersecurity Analyst Intern — **Jul 2023 – Aug 2023**
GMR Group — *New Delhi, India*

- Performed vulnerability assessments using CVSS analysis, identifying 10+ high-severity vulnerabilities in distributed systems
- Drafted incident response reports and contributed to firewall and endpoint security policy optimization

Java Software Developer Intern — **Jun 2023 – Jul 2023**
Samsung Data Systems — *New Delhi, India*

- Designed REST APIs for enterprise applications handling large-scale transactions using MVC architecture, improving module throughput by ∼20%
- Implemented design patterns and refactored backend code to improve maintainability and reduce complexity

Technical Projects

Distributed URL Shortener (GitHub) | *Java, Spring Boot, Redis, PostgreSQL, Docker*

- Designed scalable URL shortening service handling 100K+ URLs with sub-50ms latency and 95% cache hit rate
- Implemented Redis caching and Base62 encoding algorithm supporting 3.5 trillion unique short codes
- Built token bucket rate limiting preventing API abuse while maintaining <5ms overhead
- Containerized with Docker and load tested at 1000+ requests/minute with consistent performance

HomeaZZon – AI-Powered Property Management (GitHub) | *C#, .NET 8, Azure AI, Azure SQL*

- Led backend architecture for document processing and predictive maintenance with modular service design
- Built automated document processing pipeline using Azure Form Recognizer and Vision AI for structured data extraction
- Implemented multi-tier caching strategy (Cache → AI → External API → Static fallback) for vendor suggestions, optimizing AI costs while ensuring sub-200ms response times
- Designed explainable insights system with transparent maintenance recommendations and risk scoring

Async Job Processing System (GitHub) | *Python, FastAPI, Redis, OpenAI API*

- Designed distributed job processing system handling 1000+ tasks/hour with FastAPI workers and Redis-backed queue
- Implemented idempotency keys, distributed locking, and exponential retry achieving 99.5% job success rate
- Built failure tracking and dead-letter queue for failed jobs enabling reprocessing and debugging
- Integrated OpenAI API with result caching reducing duplicate API calls by 70%

Technical Skills

Languages: Python, Java, SQL, JavaScript, C#
Backend & APIs: Spring Boot, .NET 8, FastAPI, RESTful APIs, Microservices Architecture
Databases: PostgreSQL, MySQL, MongoDB, Azure SQL Server
Cloud & DevOps: Microsoft Azure, Docker, Git, CI/CD Pipelines
AI Integration: Azure AI Vision, Azure Form Recognizer, OpenAI API, LLM prompt engineering
Frontend: React, Node.js, Express, Angular

Achievements

New American University Scholarship Recipient – Merit-based scholarship

Dean's List – 7 semesters