

Ankush Kumar

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EXPERIENCE

BMO Financial Group

November 2023 - Present

Software Engineer

Toronto, ON

- Developed and maintained **30+ RESTful APIs** using Java, Spring Boot, Spring MVC, Spring Security, and MySQL, optimizing internal financial operations
- Implemented secure **OAuth 2.0 & JWT**-based authentication to enforce robust user access control across services
- Deployed scalable services on **AWS** using EC2, S3, and RDS, improving system reliability & deployment efficiency
- Refactored APIs and optimized SQL queries, **improving response times by 15%** and reducing processing load
- Built centralized error handling and data validation layers, reducing client-side data issues by 25%

Autodesk

September 2022 - October 2023

Software Engineer

Waterloo, ON

- Developed an **n8n-powered AI workflow** to post summaries and risk scores for merge requests, reducing code review prep time by 30% per sprint and boosting overall developer efficiency
- Built Account Portal features using **React** and **Playwright** with 100% test coverage and optimized performance
- Improved homepage responsiveness across 25+ repos and **increased user engagement on homepage by 30%**
- Led Subscription Renewal project, increasing early renewals through experiments and dashboard analytics

PointClickCare

May 2021 - August 2021

Software Engineer - Intern

Waterloo, ON

- Built application to simplify doctors' documentation and integrated it with existing company healthcare products
- Designed, built, and tested end-to-end MVP features using **React**, **Redux**, **Spring Boot**, and testing suites
- Worked on schema design using **SQL** in accordance with the laws in the US and Canada to protect health information and created rollback scripts as well
- Refactored monolithic code into modular components using React hooks and Redux, enhancing code scalability

Arctic Wolf Networks

May 2020 - August 2020

Software Developer - Intern

Remote

- Led development of a schema parser, code generator, and ML-based predictor to standardize third-party data schemas using **Python** and **Java**
- Built algorithms to automate integration, **optimized workflows by 40%** & reduced manual overhead
- Engineered a real-time log ingestion and processing tool for Microsoft Office accounts
- Enhanced security coverage across systems by enabling faster and more accurate log analysis

PROJECTS

Product Specification Extractor [🔗](#) | JavaScript

- Built a program that given the description of a product, extracts product specs, by scraping multiple fully rendered client-side HTMLs using **Playwright** & then leveraging **OpenAI API's function calling** & JSON mode

VM-Nexus [🔗](#) | Python

- Engineered VM Nexus, a **Dockerized** full-stack app for VM management using **Django** and **ReactJS**

EDUCATION

University of Waterloo

Waterloo, ON

Honours Bachelor of Computer Science

October 2022

- **Coursework:** Algorithms, Operating System, Object-Oriented Programming, HCI, Applied Cryptography, Computer Security and Privacy, Data Structures, User Interfaces, Logic and Computation, Probability
- **Awards:** University of Waterloo Presidential Scholarship

TECHNICAL SKILLS

Languages: Python, C++, Java, XML, Kotlin, C, JavaScript, Typescript, SQL, Bash, Scheme, CSS

Databases and Tools: MySQL, Oracle DB, Firebase Realtime, MongoDB, Redis, SQLite, PostgreSQL, Git, Docker, Maven, Tomcat, Postman, Jupyter Notebook, JSON, CI/CD using GitHub Actions, Microsoft Azure Cloud, AWS

Framework and Libraries: React, Redux, Node.js, Spring Boot, Android, Prisma, PyTorch, Django, ReactJS

Architecture Styles: Client-Server, MVC, MVVM, Microservices, HTTP