Ankush Kumar

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EXPERIENCE

ASAP Data Solutions Ltd. — December 2024
Full Stack Developer - Freelance — *Waterloo, ON*
- 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

BH Frontier Solutions Inc — July 2024 - November 2024
R&D Engineer — *Richmond Hill, ON*
- Streamlined **deep learning** pipeline processes, including data pre-processing, training & evaluation for efficiency
- Achieved a **30% reduction in processing time** by implementing best practices for model deployment
- Enhanced CNN model accuracy by 20% through optimization using **PyTorch** for improved AI performance

ProgramPro — January 2024 - July 2024
Software Developer — *Waterloo, ON*
- Redesigned authentication & authorization using **OAuth 2.0** & **JWT**, reducing authentication **latency by 20%**
- Collaborated on NoSQL **MongoDB** backend solutions for course management, **boosting throughput by 15%**
- Integrated **Stripe for seamless payment** processing and developed **10+ RESTful APIs** for backend support

Tata Consultancy Services — November 2022 - January 2024
Software Developer — *Remote*
- Developed and maintained **30 RESTful APIs** for "Sumaitriherp" hospital-based web application, handling CRUD operations, user authentication, patient management, & appointment scheduling, **using Spring Boot** with Spring Data JPA, Spring Security, Spring MVC, and MySQL database, resulting in streamlined processes
- **Improved web response time by 15%** through SQL query optimization and API endpoint refactoring
- Implemented data validation & error handling, **reducing errors by 25%** & ensuring accurate data processing

Deloitte Digital — May 2021 - August 2021
Web Developer - Intern — *Waterloo, ON*
- Built an interactive website using **React** and **Redux** for a cricket league, used by more than 200 users, with features including user profiles, user & team stats, previous scorecards and a league leaderboard
- **Improved load time by 15%** by managing website's state with redux and integrating lazy loading of images

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

PROJECTS

VM-Nexus 🔗 | *Python*
- Engineered VM Nexus, a **Dockerized** full-stack app for VM management using **Django** and **ReactJS**
- Integrated **Docker**, REST API & **Webpack** for seamless frontend-backend connectivity and CRUD operations

Wallet 🔗 | *Java*
- Created web application for user registration, authentication, fund transfers, withdrawals, and deposits
- Implemented core features using **Servlets, Sessions, Persistence API, and Hibernate ORM**

Anywhere Anytime 🔗 | *Publication*
- Led asynchronous collaboration tool design, enhancing remote brainstorming, task tracking, & team productivity

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, SQLLite, 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