Arnav Jain

Waterloo, ON | LinkedIn | Github | arnavjain.dev | a245jain@uwaterloo.ca

EDUCATION

University of Waterloo   **Waterloo, ON**
Bachelor of Computer Science   *Graduation Date: April 2025*

- *Core courses*: Object-Oriented Software Development, Data structures and Data Management, Operating Systems, Algorithms, User Interfaces, Relational Database Management, Software and Systems security, Software architecture
- *Awards*: President's Scholarship of Distinction, International Excellence Scholarship
- *Volunteering*: Pink Tie for Math Orientation '22, Head Pink Tie for Math Orientation '23

WORK EXPERIENCE

Ontario Lottery and Gaming   **Toronto, ON**
Technology Security Analyst Intern   *Sept 2023 – Dec 2023*

- Designed and implemented an application, complete with an interactive dashboard, to streamline the logging and analysis of **Threat Risk Assessments**
- Developed custom Python scripts for **Tenable Nessus Agent** to systematically detect and report the presence of Rapid7 agents on **1200+** workstations, **optimizing** security assessment processes
- Architected and deployed a **Disaster Recovery Tracking System** using Power Automate and Power Apps, enhancing the efficiency by **~25%** of managing disaster recovery records of various services and products.
- Lead the migration of team workflows from **Microsoft Planner** to **Jira**, collaborating with team leads to optimize task allocation and progress-monitoring processes.

The Globe and Mail   **Toronto, ON**
DevOps Engineering Intern   *Jan 2023 – April 2023*

- Automated the **import** of **500+** manually created IAM resources into **Terraform** state by developing **bash scripts**, enhancing efficiency and accuracy
- Led a successful company-wide upgrade of **AWS EKS cluster** and **Karpenter** resulting in **~ 40%** cost savings by optimizing **EC2 instance types** according to the compute load
- Delivered a comprehensive **CI/CD** architecture on **BuildKite** that effectively increased automation and **reduced** operational **Kubernetes** costs
- Conducted rigorous proof-of-concept testing to validate the feasibility and potential impact of various features and integrations within the platform

Loblaw Companies Limited   **Toronto, ON**
Site Reliability Engineering Intern   *May 2022 – August 2022*

- Spearheaded the successful migration of **100+** retail stores to **Google Cloud Platform** by developing and implementing custom frameworks and **CI/CD pipelines** at scale
- Created an interactive dashboard that extracted real-time data from the GCP console using a **node.js** backend and served it to a **react.js** frontend, enabling efficient monitoring of the status of **virtual machine (VM) instances** running in the cloud.
- Streamlined the store migration process by designing **Terraform** templates that automated the creation of custom Virtual Private Clouds (**VPCs**), Managed Instance Groups (**MIGs**), and Internal Load Balancers (**ILBs**)

Microsoft – Azure & AI Fundamentals, Waterloo Experience (WE) Accelerate   **Waterloo, ON**
Project Team Member Intern   *May 2021 – August 2021*

- Designed an information portal to help individuals search for disabled-friendly education solutions with higher education institutes in Ontario
- Conceptualized and designed a ML model to match individuals with suitable universities
- Trained in Azure and AI Fundamentals; completed **Azure AZ-900, AI-900** certifications

PROJECTS

- **Beacon** | *Kotlin, Nest.js, MongoDB, Geocode API, WebSockets, OAuth, okHTTP*
  Collaborated to build an **android** app that connects people looking for help with basic tasks with those within physical proximity able to help with those tasks.
- **CreateCI/CD** | *Octokit, GitHub API, HuggingFace, Together AI, Code Llama*
  Developing an **AI model** using **CodeLlama** to automatically generate **CI/CD** pipeline configurations in YAML format, to significantly optimizing the workflow setup for JavaScript applications
- **SPshORTS** | *React.js, Flask, MongoDB, Cohere API, NewsAPI*
  A sports news app which webscrapes sports articles from various news sites and summarizes them into a 60-word article using text summarization tool of the CohereAI API

TECHNICAL QUALIFICATIONS

- **Programming Languages:** C, C++, Java, JavaScript, Python, Kotlin, SQL
- **Frameworks:** Flask, Node.js, Express, React.js, Nestjs, Angular, Scikit-learn, pandas, Springboot
- **Enterprise Software:** Docker, Helm, K8s, Terraform, AWS, GCP, Azure, Rapid7, Tenable, IBM D2, MongoDB

EXTRACURRICULAR ACTIVITIES AND INTERESTS

- **JP Morgan Chase Software Engineering Virtual Experience Program Participant – January 2022**
- **Electronic Arts Software Engineering Virtual Experience Program Participant - December 2023**