# Aarya Patel

North Bay, ON | 647-308-4696 | aaryapatel1@hotmail.com | linkedin.com/in/aarya-patel-58547522a | github.com/Aarya423

#### **EDUCATION**

# **University of Western Ontario**

London, ON, CA

2021 - 2025

BESc. in Software Engineering

- Awards: Western University Scholarship of Distinction 2021, Dean's Honor List Recipient for 2024-2025
- Coursework: Data Structure and Algorithm for Object-Oriented Design, Scripting Programming Language Fundamentals, Software Design, Software Construction, Web Technology, Software Project & Process Management, Software Requirements & Analysis, Database Management Systems, Data Analytics, Cloud Computing, Information Security.

#### **EXPERIENCE**

# **IT Support Technician**

North Bay, ON, CA

June 2025 - Present

Quantum Lifecycle Partners LP

- Diagnosed and repaired 20+ devices weekly, contributing to a 35% reduction in e-waste through secure reuse and recycling initiatives.
- Achieved a 90%+ first-pass repair success rate by executing detailed diagnostics, hardware replacements, and OS configurations in alignment with quality standards.
- Maintained detailed system logs and collaborated with cross-functional teams, ensuring 100% SLA compliance and improved traceability across repairs.

## **Software Developer (Capstone)**

London, ON, CA

IDSL – Intelligent Data Science Lab

September 2024 – April 2025

- Designed and deployed a secure file processing pipeline supporting seamless genomic data uploads, custom REST API endpoints, and job tracking, enabling efficient end-to-end workflow for lab users.
- Integrated an AI insights model using GPT-2, providing automated contextual analysis and summarization of DNA/RNA results, improving interpretability for researchers by 40%.
- Fortified Genescope's data security by developing a validation system, filtering 99.9% of corrupted or non-standard DNA/RNA sequence uploads, ensuring data integrity for analysis and reducing downstream errors.
- Built a scalable backend infrastructure with MongoDB and AWS EC2, increasing data processing capacity by 2x to handle concurrent analysis efficiently.

#### **Security Data Analyst Extern**

London, ON, CA

Extern - Webacy Web3 Security Data Analytics Externship

July 2024 – August 2024

- Analyzed and labeled 900+ smart contracts for vulnerabilities, improving threat detection accuracy by 15%.
- Validated peer-generated data labels, increasing dataset reliability and reducing error rates by 10%.
- Performed frequency and correlation analysis of risk tags, identifying the most common vulnerabilities and their associations, improving risk profiling.
- Utilized unsupervised machine learning techniques for cluster analysis, uncovering patterns in smart contracts that contributed to a 12% improvement in risk prediction models.

#### **PROJECTS**

### NPO Website | ReactJS, ViteJS, MongoDB, JavaScript, HTML, CSS, Flask

• Built and deployed a Vite-React platform with a Flask backend and MongoDB Atlas integration, enabling secure data access for 50+ caregivers and real-time content management for administrators.

#### Cinema Showcase Website | Python, Flask, MySQL, JavaScript, HTML, CSS

• Developed a full-stack cinema platform with account management, movie search, ticketing, and admin tools, optimizing MySQL queries for 30% faster response times.

## TECHNICAL SKILLS

**Programming Languages:** Python, JavaScript, TypeScript, Java, C++, C, PHP, R, SQL, MySQL, HTML, CSS, ARMv7 Assembly, JavaFX

Web & Application Frameworks: Flask, React, Angular, Vite, Node.js, .NET, Flask-CORS, Jinja2

**Data Science & Machine Learning:** scikit-learn, Pandas, NumPy, GPT-2, unsupervised learning, classification models, neural networks, feature engineering, data preprocessing, model evaluation, statistical analysis

Cloud & DevOps: AWS (EC2, S3), Google Cloud Platform (Vertex AI, BigQuery, Workbench), Microsoft Azure, Docker, Kubernetes, Apache Airflow, Vertex Pipelines, Cloud Storage Buckets

Databases: PostgreSQL, MongoDB, MongoDB Atlas, MySQL, SQL, Oracle, BigQuery

Tools & Platforms: Git, GitHub, Tableau, QGroundControl, Ubuntu, VS Code, Postman, REST APIs, Vertex AI Workbench, Apache Airflow, Bash, Figma

**Software & Design Methodologies:** Agile (Scrum), CI/CD pipelines, version control, data validation & security, scalable system design, backend optimization, responsive web design, RESTful architecture, secure file upload handling, cloud-native architecture