

# Brielle Nguyen

416-886-4638; [nguyenhaphuong2002@gmail.com](mailto:nguyenhaphuong2002@gmail.com); [LinkedIn](#); [Github](#); [Website](#)

## EDUCATION

**Western University**, London, ON, Canada

2025

*Bachelor of Science, Honours Specialization in Computer Science (GPA: 3.8) – TD Scholarship for Women in Data Analytics*

*Hackathon winner: SheHacks+ 7: General Motors - Best Use of Leveraging Technologies to Improve Mobility Needs (Jan 2023)*

**Courses:** Operating System, Machine Learning, Data Structures, Computer Architecture, Parallel Programming, Compilers, System Programming

**Ivey Business School, Western University**, London, ON, Canada

2025

*Bachelor of Arts, Honours Business Administration (HBA) – Ivey Scholars' Scholarship (2022)*

## WORK EXPERIENCE

**S&P Global**, Toronto, ON, Canada

July 2024 – October 2024

*Software Engineer Intern*

- **Redesign the data ingestion pipelines for the Credit Estimate API**, migrating from a monolithic Java service to Go-based microservices on Kubernetes, which improved system reliability by 30% and allowed independent scaling of issuer-level components used by 50K+ clients.
- **Built and deployed TensorFlow models for credit default risk prediction**, integrating Python-based ML inference into the backend to personalize credit score outputs and reduce average API query latency by 20%.
- **Refactored the internal monitoring dashboard for Credit Estimate using React and Node.js**, improving page responsiveness by 25% and reducing initial load times by 15%, enabling analysts to view real-time risk deltas faster.
- **Implemented infrastructure-as-code (IaC) for development and staging environments** using Terraform and Docker, and refactored Jenkins CI/CD pipelines to automate environment-specific deployments, reducing manual config errors and improving delivery velocity by 50%.

**Hydro One**, Toronto, ON, Canada

May 2024 – July 2024

*Technical Analyst Intern, Digital Transformation*

- **Collaborated with Accenture and Capgemini to define a cloud migration roadmap**, laying the foundation for a next-gen digital call center that improved client issue resolution times by 20% and boosted service reliability.
- **Facilitated sessions to develop architectural diagrams**, accelerating engineer onboarding and underscoring distributed systems design for teams.
- **Acted as the key liaison between engineering, product, and external partners**— leading to the successful launch of 2 key product features, resulting in a 20% increase in user engagement and an improvement in team efficiency.

**Appen AI**, Toronto, ON, Canada

June 2023 – August 2023

*Product Intern*

- **Contributed to product strategy revamp for Appen's LLM product**, improving lead generation and product-market fit through refinement of product positioning and go-to-market efforts.
- **Supported the product lifecycle for Appen's RLHF product**, including PRDs creation, cross-functional coordination, and sprint planning.

## TECHNICAL PROJECTS

**CineMatch – AI Movie Guide** ([Github link](#))

2025

*SwiftUI, FastAPI, Python, scikit-learn, OpenAI, SQLite, PostgreSQL, SQLAlchemy, REST APIs, Docker, Xcode, TMDb API*

- **Designed and implemented a modular backend in FastAPI with RESTful endpoints**, leveraging SQLAlchemy and PostgreSQL to persist user ratings, mood tags, and rankings for real-time personalization across the iOS SwiftUI client.
- **Developed an AI-driven mood-to-genre mapping engine** using embedding-based similarity and label classification; mapped inputs like "heartbreak" or "thrilling" to weighted genre/tag vectors for context-aware content filtering.
- **Built an NLP pipeline to parse natural language voice commands** (e.g., "Show me a romantic comedy under 90 minutes"), extracting entities and constraints via regex + semantic parsing, and dynamically converting them to filterable backend parameters.

**Payment Processing System** ([Github link](#))

2024

*React, Node.js, Java, Spring Boot, SQL, MongoDB, REST APIs, AWS, Docker, Jenkins, Python, AJAX, JavaScript, WebSockets*

- **Built a backend system using Node.js and Spring Boot** powering the checkout and transaction flows for a simulated e-commerce platform, supporting credit, debit, and bank transfer payments with dual-database architecture (SQL for structured data; MongoDB for unstructured data).
- **Optimized backend performance** to reduce API response times by 20% and enhancing scalability via AWS load-balancing to ensure fault-tolerance for thousands of concurrent users.

**Crypto Coins Trading System**

2022

*Java, JavaScript, HTML, CSS, MongoDB, React, Script*

- **Developed a cryptocurrency trading system** using Java and React, implementing RESTful APIs in Spring Boot for real-time data retrieval-reducing integration time by 30% and boosting transaction efficiency by 20%.
- **Built analytics modules** using JavaScript and MongoDB that enabled traders to customize strategies and visualize market trends, enhancing trading insights and decision-making.

## SKILLS

**Programming:** Python, Java, JavaScript (ES6+), C/C++, SQL, R, HTML, CSS, React.js, Node.js, Express.js, Redux/Immutable, TypeScript, Django.

**Core Competencies:** Backend Services, Distributed Systems, Scalability, Financial Systems, Performance Optimization.

**Tools:** Docker, Jenkins, Git/GitHub, AWS, Jira, Confluence, Slack, CI/CD Pipelines, Hadoop, Apache Spark, PowerBI, Tableau, Excel, Figma, Adobe.