

Duc Anh Nguyen

 Email  Phone
 LinkedIn  GitHub

Education

Concordia University (Bachelors of Computer Science)

Expected Graduation: Dec 2026

- Courses: Data Structure & Algorithms, Databases, Operating Systems, Advanced C++ Programming, Artificial Intelligence

Work Experience

Shopify, Software Engineering Intern

May 2025 - Present

- Collaborating with a team of 4 to enable PayPal & Stripe Credit Cards in Shopify's Unified Payments flow using Ruby, Ruby on Rails, MySQL, GraphQL, processing 65% of Shopify's Global Merchant Volume.

Intact Labs, AI Software Developer Intern

January 2025 - April 2025

- Refactored the insurance claims backend from regex-based to Retrieval Augmented Generation (RAG)-based using Python, Flask and AWS Bedrock, reducing manual claims reviewing efforts by 50%.
- Developed an internal tool that centralizes LLM evaluation & observability using Python, LangChain, Arize Phoenix, OpenAI & Anthropic APIs, streamlining RAG fine-tuning process for 2000+ Intact developers.
- Implemented customized observability for RAG/LLM applications by developing an AWS Lambda function with Python that captures inferences, RAG retrieval and workflow configurations to MLflow on AWS SageMaker

Royal Bank of Canada, Software Developer Intern

May 2024 - January 2025

- Developed a governance system for Helios (RBC's CI/CD platform) using Java, Spring Boot, MongoDB, Kafka, enforcing deployments to meet security and code-quality standards across RBC.
- Led the end-to-end integration of Snyk (code scanning tool) into Helios as a mandatory code quality check, overseeing the project life-cycle, including requirements gathering, system design and implementation.
- Developed RESTful APIs with Python and Flask that trigger code quality scans for Helios deployments and automatically re-scans when prior results have expired, storing all scan outcomes in MongoDB.
- Authored a reusable GitHub Actions YAML template with TypeScript, calling the Snyk service and auto-syncs vulnerability findings to users' GitHub Issues, powering 50,000+ daily CI/CD pipeline runs.

Armonia, Full-stack Engineer Intern

February 2024 - May 2024

- Won **4th place** in the Pierre-Péladeau entrepreneurial competition, against 50+ entrepreneurial teams, winning **\$25,000**
- Led the refactor of core products to Next.js, TypeScript, Express.js, eliminating the company's reliance on external development teams.
- Reduced API latency by refactoring large back-end APIs into smaller, specialized endpoints and implementing response caching for high-traffic requests using Redis.
- Optimized the CI/CD pipeline, reducing internal development downtime by containerizing application and automating deployment process using GitHub Actions.

Projects

AI Transcription Correction — Intact DataLab Hackathon 2nd place

Sep 2024 - Present

- Developed an AI transcription correction service, improving Word-error-rate (WER) by 20% over Intact's baseline, chosen by a Director for potential production implementation
- Implemented the transcript correction AI service by flagging high-perplexity phrases, chunking long sentences into small, comprehensible chunks then corrected using OpenAI API with a few-shot prompt.
- Implemented RESTful APIs to communicate with the AI system using Flask and Python and front-end using React.js, Next.js, TypeScript, TailwindCSS, HTML.

Programming Languages, Technologies, and Miscellaneous

Programming Languages: Java, TypeScript, Python, JavaScript, SQL, C++, C, PHP, HTML, CSS

Technologies: Spring Boot, MongoDB, Flask, React, Node.js, Apache Kafka, Express.js, PostgreSQL, Docker, MySQL, Jenkins, pytest

Miscellaneous: Linux, MacOS, Openshift Cloud Platform, JUnit, Mockito, Nginx, GitHub Actions