Nguyen-Hanh Nong

343-204-4026 | nongnguyenhanh@gmail.com | linkedin.com/in/nguyen-hanh-nong | github.com/Nguyen-HanhNong

Technical Skills

Programming Languages: Python, Java, JavaScript, TypeScript, C++, C, Go, Rust, HTML/CSS
Frameworks & Libraries: React, Next.js, Node.js, Spring Boot, Hibernate, Django, Express.js, Electron, ASP.NET
Machine Learning & Data: TensorFlow, scikit-learn, Pandas, NumPy, LangChain
Developer Tools & Platforms: Git, GitHub, GitLab, Docker, Apache Maven, Swagger, Kafka, gRPC, Elasticsearch
Databases & Cloud: SQL, MySQL, PostgreSQL, MongoDB, SQLite, DynamoDB, Amazon S3

Experience

Software Engineer Intern September 2025 - December 2025
Tesla *Fremont, California*
- Incoming Software Engineer Intern on the Cell Manufacturing team at Tesla for the Fall 2025 term.

Software Developer Intern May 2025 - August 2025
Amazon Web Services *Toronto, Ontario*
- Designed and implemented an **account registration system for AWS Partner** users by building RESTful APIs with **Java, Spring Boot, EC2, and DynamoDB**, enabling seamless partner onboarding at scale.
- Built a **frontend portal** for the registration system using **TypeScript, React, and Next.js**, giving partners a streamlined interface to manage onboarding and account access.
- Engineered a custom article ingestion pipeline leveraging **AWS EventBridge, Python, and Amazon S3** to convert **Salesforce documents into HTML articles**, reducing ingestion time and improving content distribution for internal webpages.
- Enhanced **system reliability and observability** across both the registration system and ingestion pipeline by **integrating CloudWatch dashboards and alarms**, which enabled proactive issue detection and **reduced customer tickets by 10%.**
- Streamlined delivery of both services by **containerizing applications with Docker** and automating deployments via **AWS CodePipeline and CloudFormation**, cutting manual release effort and accelerating feature rollout.

Software Engineer Intern January 2025 - April 2025
Cisco *Ottawa, Ontario*
- Designed and deployed a **CLI-based telemetry performance visualization tool** for **gRPC and NETCONF** subscriptions, **streamlining CPU and RAM monitoring** and enabling faster debugging of network issues.
- Developed a **real-time process monitoring system in C** that automatically detects and terminates memory leaks and high-CPU processes, **reducing overall memory usage by 20%** and improving system stability.
- Extended **performance visibility to the developer workflow** by building an **automated dashboard with Java, Grafana, and Kafka** to track daily build changes, **accelerating the detection of breaking commits and reducing debugging time** for development teams.

Software Engineer Intern May 2024 - August 2024
Qualcomm *Toronto, Ontario*
- Led development of a **full-stack desktop color calibration tool** using **Electron, TypeScript, and React**, allowing users to fine-tune display properties (hue, saturation, brightness) and successfully deployed to **500+ clients.**
- Designed and implemented **backend services with C# and ASP.NET**, integrating **native C++ drivers for color calibration**, which reduced processing latency by 50%.
- Implemented a **CI/CD pipeline for ASP.NET APIs using Swagger, NUnit, and Jenkins**, improving test coverage and ensuring reliable daily builds with automated code quality reporting.
- Engineered a **cross-platform Python SDK to extract display color and hardware data from Android devices**, replacing a DLL-based solution and significantly improving OS compatibility and scalability.

Software Developer Intern May 2023 - August 2023
Nokia *Ottawa, Ontario*
- Contributed to real-time software development in **Embedded C for Nokia's SR OS**, improving **system performance, scalability, and hardware-level integration** in production environments.
- Integrated **GitLab CI/CD with containerized Pytest suites on a Kubernetes cluster**, enabling **25+ parallel test runs** and dynamic scaling for faster regression coverage.
- Applied **machine learning techniques in Python** using **scikit-learn and NumPy** to classify packet patterns and detect **anomalies in encrypted traffic flows**, improving validation efficiency and reducing reliance on manual inspection.

Projects

Sentinel.AI | **Go, Python, SQLite, NumPy, Pandas, Scikit-learn, Tensorflow, Matplotlib**
- Built a **Counter-Strike 2** anti-cheat using **Python and Go**, integrating TensorFlow and Scikit-learn to analyze player gameplay data and **classify cheating behavior** from player actions and statistics.
- Leveraged **Go's concurrency model** to scrape and process **large volumes of player telemetry**, reducing data retrieval time by 40%.
- Designed a **scalable SQLite datastore** with **NumPy/Pandas preprocessing**, streamlining dataset integration for ML training and validation.

Education

Carleton University September 2021 - April 2026
Bachelor of Computer Science, Concentration in Artificial Intelligence and Machine Learning *Ottawa, Ontario*
- **GPA: 4.0/4.0**