Andy Yun

Backend / AI Tooling Engineer (Co-op / Intern)

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Backend-focused ECE student who ships internal AI tooling and production backends. Built a Windows + FastAPI LLM assistant with governance (RBAC/audit/versioned distribution), prompt templates, and leakage-risk monitoring for a ~50-person org.

EXPERIENCE

Korea Fund Ratings (KFR) 2024.01–2024.04
AI Researcher / Internal Tooling (Intern)

- Led an internal LLM assistant for a ~50-person org: Windows client (PySide6) + always-on FastAPI service.
- Built governance: authentication, RBAC admin tools, versioned client distribution, and audit logs (usage + IP/MAC/app version).
- Shipped a prompt template library (~10) with attribution + moderation; added leakage-risk keyword thresholds (A/B/C) with admin alerts.
- Connected internal sources (news/Excel/fund docs) via SQL Server (SQLAlchemy/pyodbc); added optional local summarization to reduce token overflow and UI stalls.

Escape Platforms 2023.06–2023.08
Software Backend Developer (Co-op)

- Built ~10 REST endpoints and serverless data flows on AWS.
- Implemented AppSync + Lambda + DynamoDB pipelines with Node.js/TypeScript; streamlined ops via GraphQL; shipped Jest tests.

Huawei Technologies Canada 2022.09–2022.12
6G R&D Engineer (Co-op)

- Developed internal APIs (C++14/Boost) callable from Python; integrated with a CARLA server for simulation workflows.
- Built a PyQt GUI to monitor/control Unreal Engine simulation; implemented ray-tracing logic in a CARLA context.

Stackpole International 2022.01–2022.04
Software Developer (Co-op)

- Reduced PLC↔Host communication overhead by ~30% via a caching mechanism.
- Built GUI/ML/telemetry tooling with Python (Qt), OpenCV, and PyTorch; supported PLC and GPU servers.
- Built a lightweight ANN model for Jetson Nano + PLC to reduce server load and improve response time.

PROJECTS

Logic.Gate Tutoring Platform 2021–Present
STEM tutoring platform; prototyping tutoring workflows and evaluation-first improvements with a reliability/UX focus.

Find My Pill Platform 2022.10–2023.12
Built REST API and data model; improved response time by ~23.7% via 3NF normalization.

- Designed a microservice-friendly architecture and a custom recommendation approach for text input.

SKILLS

Backend
Python (FastAPI), Node.js/TypeScript, SQL, GraphQL, REST

Cloud / Data
AWS (Lambda/AppSync/DynamoDB), SQLAlchemy/pyodbc, UNIX/Linux

AI Tooling
LangChain, OpenAI API, governance/audit, optional local summarization

Systems
C/C++ (Boost), Qt (PySide6/PyQt), packaging & internal distribution

EDUCATION

University of Waterloo
BASc Candidate, Computer Engineering (ECE) · 2021.09–2026.06

Scholarship
University of Waterloo President's Scholarship (2021)

SERVICE

Republic of Korea Army
Tactical C4I Maintenance & Operation · 2024.09–2026.03

VOLUNTEERING

FIRST Robotics Team 7722
Programming & Computing Mentor · 2023.01–2023.08

Mentored 9 students in embedded programming, sensor fusion, and motion planning; improved autonomous reliability (reported 93% success).