Eduard Anton

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SKILLS

Languages & Systems: Python, C/C++, Java, Go, JavaScript, MATLAB, Bash, CUDA
Machine Learning: Deep Learning, Reinforcement Learning, LLMs, PyTorch, Tensorflow, Scikit-learn
Distributed & Infra: Linux, AWS, Azure, Docker, Kubernetes, CI/CD, Redis, PostgreSQL, MongoDB
Frontend & Mobile: React, Svelte, Flutter

Languages: **English** (Native/Bilingual), **French** (Native/Bilingual), **Romanian** (Professional)

EDUCATION

McGill University
- M.Sc. Computer Science (AI/ML Stream)   Sept. 2025 - Dec 2026
- B.Eng. Software Engineering Co-Op   (GPA 3.75/4.0) | Sept. 2021 - May 2025

EXPERIENCES

Streamwise
Lead Software Engineer / CTO (Founding Team)   Jul. 2025 - Ongoing

- Architected and led development of a production-grade, low-latency **ASR + LLM** system for real-time, context-aware speech moderation in live streaming environments.
- Owned end-to-end system design, model training with **PyTorch**, real-time inference, and distributed backend infrastructure in **Go**.
- Scaled a real-time media ingestion pipeline for ML inference to **100+ concurrent users** on **AWS (Kubernetes)** under strict streaming latency constraints.

CAE Inc.
Aircraft Software Developer Intern   May. 2024 - Sept. 2024

- Engineered safety-critical **C++** software for avionics radio controllers used in a **$15M** aircraft simulator.
- Drove test automation and CI/CD adoption on **Azure** pipelines, increasing C++ **code coverage to 96%**.
- Authored integration design documents across cross-functional teams, enabling deployment on production hardware and resolving dozens of client-reported issues.

Ericsson
Software Developer Intern   Jan. 2024 - April 2024

- Built and demonstrated cloud-native 5G proof-of-concept systems in **Java** and **JavaScript** on **Azure** IMS infrastructure for real-time telecom workloads.
- Integrated an LLM-based real-time speech translation service into live voice call pipelines, enabling real-time translated audio output under strict latency and reliability constraints.
- Developed a networking-heavy **Flutter Android** application supporting SIP, WebRTC, UDP, and TCP.

Airbus
Software Engineering Intern   May. 2023 - Sept. 2023

- Developed automated data-collection systems in **C++** and **LabVIEW** to accelerate aircraft incident analysis and simulator testing workflows.
- Implemented high-fidelity cockpit displays using **VAPS** and **C++**, interfacing directly with flight simulation models to ensure accurate avionics behavior.
- Designed and implemented a **distributed software** in **Python,** connecting simulation nodes via shared memory and sockets to enable cross-component monitoring and accelerated debugging.

RESEARCH & PUBLICATIONS

Anytime Planning with Continuous Thought Machines - Paper   Dec. 2025

- Proposed a novel latent space decision-making framework in **Python** using Continuous Thought Machines (CTMs) architecture for partially observable environments.
- Analyzed how probabilistic internal representations guide short-horizon decisions, highlighting performance trade-offs compared to LSTMs under partial observability.

LEADERSHIP & INVOLVEMENT

McHacks Hackathon

Director & Sponsorship Lead   Oct. 2022 - Apr. 2025

- Led organization of McGill's largest hackathon with **600+ participants**.
- Secured **$120,000+** in sponsorship funding from major tech industry partners.

McGill Robotics Team

AUV Software Developer   Sep. 2023 - Feb. 2024

- Developed computer vision **YOLOv7** object detection and control software in **Python** for an automatic underwater vehicle running **ROS** on an **NVIDIA Jetson**.

PROJECTS

RL High Altitude Balloon Flight Computer - GitHub   Sept. 2024 - May 2025

- Built a **reinforcement-learning**-driven flight computer in **C**, achieving successful autonomous flights above 65,000 ft.
- Trained a **SAC agent** using physics-based simulation (**MATLAB**, **TensorFlow**) and deployed real-time control logic on an embedded **Teensy 4.1** device running **RTOS**.

Enhanced C Compiler - GitHub   Jan. 2025 - Apr. 2025

- Implemented a full C compiler in **Java**, including CFG parsing, semantic analysis, register allocation, and MIPS code generation.
- Designed custom dynamic dispatch mechanisms enabling polymorphism and OOP features.

Photorealistic Ray Tracer - GitHub   Sept. 2024 - Nov. 2024

- Developed a GPU-accelerated ray tracing engine using **Python** and **Taichi** with **CUDA** support.
- Integrated **Monte Carlo sampling** and probabilistic BRDFs for photorealistic rendering.

ScamBack AI Agent - Devpost Project   Nov. 2024

- Built an autonomous, real-time and multi-modal **conversational AI agent** in **Python** using **speech-to-text**, **LLM**-driven dialogue, and **text-to-speech** to engage phone scammers.
- Implemented structured context and tool integration (**MCP**-style) within a low-latency pipeline, allowing coherent conversations over live calls (**Twilio**).

MediaFlux Livestream Pipeline - GitHub   Jan. 2024 - July 2024

- Built a distributed **Go**-based live streaming pipeline using **FFmpeg** for real-time audio/video transcoding and ML-based video processing, streaming to Twitch, YouTube, and custom RTMP endpoints.
- Designed an **RTMP proxy** and **Kubernetes** backend enabling scalable inference with sub-3-second end-to-end latency.

UniTrade Marketplace App - GitHub   Jan. 2023 - Apr. 2023

- Created a student equipment marketplace web app using a **React** front-end and **Java** Spring back-end.
- Conducted unit and integration testing of the back-end **REST API** using Cucumber and JUnit.
- Implemented Hibernate ORM for **PostgreSQL** database integration and management.