Youssef Ouarad

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Education

B.Eng. in Software Engineering – GPA of **3.4/4**	Montreal, QC
Minor in **Cybersecurity** - Polytechnique Montreal	2021 - 2025

Skills

Languages & Frameworks:	C++, Python, Java, JavaScript/TypeScript, Go, React, Angular, Electron
Cloud/DevOps:	AWS, Azure, Docker, Kubernetes, CI/CD, Git
Data:	MySQL, PostgreSQL, MongoDB
Languages :	Fluent in spoken and written French and English

Experience

Software Engineer, Technical Lead (Part-time → Full-time)
Thales - Montreal, Canada
September 2024–August 2025

- **Lead technical design and architecture** for a 3-person engineering team. Defined the tech stack, designed scalable systems, and ensured delivery of key milestones.
- Modernized legacy tools with full-stack development (Go, MEAN stack), improving portability and experience.
- Deployed **high-performance Go microservices** for concurrent processing and API management.

Full-Stack Developer and Data Analyst (Co-Op)
LUDO - Montreal, Canada
January 2025–May 2025

- Built a web dashboard for managing and analyzing mobile app data to improve user participation.
- Performed **data analysis** on participation trends, driving event optimization and engagement gains.
- Implemented backend data layers and **AI workflows** for automated support, team generation, and fraud detection.

Software Engineer, Test & Avionics Tools (Intern)
Thales - Montreal, Canada
May 2024–August 2024

- Developed an **Electron-based Virtual Testing Bench (VTB)** to improve product testing UX.
- Integrated physical test rig components into the VTB to unify virtual and physical testing workflows.
- Automated package deployment with a **Python-based script for Artifactory**, improving DevOps efficiency.

Founder & Lead Developer
Aube - Montreal, Canada
January 2020–Present

- Employed **Python, C++, and quant libraries** to develop robust, data-driven models that optimize entries and exits based on real-time market signals.
- Developed a backtesting engine capable of simulating complex multi-leg strategies in derivatives markets
- Managed family and friends portfolios while maintaining **Sharpe ratio > 1**.

Projects

Mobile and desktop multiplayer guess the difference app	MEAN Stack, Dart, Electron, Flutter
Web multiplayer quiz app	MEAN stack, NestJS, AWS
Autonomous robot car	C++, Embedded Systems, Sensors
AI Divercite player	Minimax, Python, Game AI, Alpha-Beta Pruning
Sports datasets analysis and visualization	Python, Plotly, Pandas, Data Visualization & Analytics
Android Strava-like app	Java, Android SDK, Firebase, Google Maps
Cloud MapReduce & Hadoop setup	Python, AWS EC2, Spark, Shell Scripting
Cloud Infrastructure setup	Flask, MySQL, AWS EC2, Shell Scripting
InsightIQ - WIP	AI, Visualization & Analytics