CHARLES POULIN

poulincharles.com — charlespoulin@hotmail.ca — github.com/CharlesPoulin — linkedin.com/in/charles-poulin/

EDUCATION

École Secondaire des Pionniers, Québec *2015 - 2020*
DES in Omniscience Informatic Art and Multimedia
Relevant Learning: Programming (Visual Basic, Python, Web Development), Microsoft Office Suite

Cégep de Trois-Rivières, Québec *2020 - 2022*
DEC in Science de la Nature
Extracurricular: Member, Chess Committee
Relevant Courses: Algorithms and Statistics (Maple), Astrophysics

University Laval, Québec *Autumn 2022 - Spring 2026*
Bachelor of Science in Software Engineering
Extracurricular: Member of the Artificial Intelligence Committee.
Achievements: Internship letter of excellence from the Vice-Dean of Studies.

EXPERIENCE

Ubisoft Summer 2023
Software Engineer Intern *Montréal, QC*

· Spearheaded the end-to-end development of an innovative JavaScript library, ensuring seamless integration with the .NET Blazor framework, leveraging Test-Driven Development.
· Engineered performance optimizations for data-heavy applications, resulting in a responsive and fluid interface for complex graphical data representations.
· Consistently exceeded Agile sprint deliverables, expediting project milestones and leading the charge in the iterative refinement of critical product features.
· Honored by team lead for delivering exceptional bilingual presentations to multidisciplinary teams, which elevated project visibility and stakeholder involvement.
· Actively contributed across all phases of the Software Development Life Cycle (SDLC), from initial concept generation to feature development and final presentation, showcasing a full spectrum of engineering proficiencies.
· Commended for exceptional flexibility and performance, culminating in an offer to continue as a valuable team member in a callback offer.

PROJECT

PyTorch Quantum Machine Learning Project *Ongoing*

- Led the integration of quantum computing algorithms with machine learning models.
- Utilized PyTorch and Qiskit to analyze data, optimize models, and deploy on IBM quantum computers.
- Self-taught quantum computing, illustrating dedication to emerging technologies and continuous learning.

Quantum-Classical Algorithm Performance Visualization *Ongoing*

- Designed and implemented a suite of visualization tools using Qiskit, Python, NumPy, and SciPy to benchmark and compare the performance of quantum versus classical optimization algorithms.
- Crafted interactive graphs and heatmaps, alongside comprehensive statistical analyses, to facilitate in-depth performance assessment and algorithm evaluation.
- Deepened programming proficiency in quantum computing and data analysis, leading to insights that advance the practical implementation of quantum solutions for optimization challenges.

GitHub Contributions

- **Qiskit**: Contributed to Rust and Python codebases, enhancing quantum computing libraries.
- **Ankilearn**: Aided in the development of educational tools using Rust and Python.

TECHNICAL STRENGTHS

Programming Languages	C++, Python, Rust, JavaScript, C#
Software and Libraries	PyTorch, scikit-learn, Qiskit, D3, Xunit, .NET environment
Web Development	HTML, CSS, Tailwind css, Next.js, MS SQL Server, Blazor, Swagger,
Tools	Git, Docker, Agile Methodologies