

Faycal Kilali

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Education

Mount Allison University – B.Sc. (Hons) Computer Science and Mathematics – Sackville, NB	2022 – 2026
• Founder and President of the AI & Robotics Society – Sackville, NB	2023-2026
• Co-Founder and Vice President of the Mature Students Club – Sackville, NB	2023-2025

Professional Development

French Language Training – Quebec Government Francisation Program (MIFI) – Montreal, QC	2025
<i>Completed intensive French language coursework at Université du Québec à Montréal</i>	

Certifications

<i>Machine Learning with Python</i> – IBM, Coursera	2024
<i>Object-Oriented Design</i> – University of Alberta, Coursera	2024
<i>Microsoft Learn AI Skills Challenge</i>	2023

Experience

Fullstack Software Developer, AI Object Detection Framework and Educational Tool – Sackville, NB May 2024 – Sep 2024

- Led the development of a grant-funded project implementing an AI-based object detection framework, providing an inspiring educational game to users
- Designed and implemented an educational tool using Flask, Tkinter, and Streamlit, improving user experience
- Managed, directed, and developed the project from conception to deployment, verifying the quality of the work and ensuring timely delivery as constrained by the budget and schedule

Mathematics and Computer Science Peer Tutor, Mount Allison University – Sackville, NB Mar 2023 – Sep 2024

- Tutored 50+ students across various mathematical subjects, developing customized teaching approaches
- Displayed proficiency in teaching and problem-solving, resulting in positive feedback from both students and professors

Technical Lead, Greater Dorchester Moving Forward – Dorchester, NB Jan 2023 – Jul 2023

- Spearheaded technology operations for a nonprofit organization by leading data collection, mapping, and software development initiatives—enhancing impact and advancing the mission
- Collaborated with other departments within the organization to integrate technical solutions with broader strategic goals
- Led a team of volunteers and staff members, fostering a positive and productive work environment

Projects

Medieval Conquests 2016 – 2019

- Founded and led a successful Medieval-era module for the popular game "Mount & Blade: Warband," managing a team of volunteer testers and contributors for over a year and a half, achieving a 92% rating on Steam
- Spearheaded the implementation of a wide range of features, including enhanced combat fidelity, improved graphics, and engaging gameplay mechanics, resulting in over 120,000 unique active subscribers and 500,000 unique visitors

Tainted Paths 2018 – 2019

- Founded, led development, and managed a diverse team of volunteers for the project
- Achieved impressive results with over 203,000+ unique visitors 34,000+ unique active subscribers, and a positive rating of around 90% in Steam

Floris Evolved 2015 – 2016

- Co-developed and Co-founded major game overhaul with 160,000+ active subscribers and over 600,000 unique visitors
- Managed all aspects of the project, including technical development, project management, and team leadership, culminating to a 95% positive rating on Steam

Skills

Programming: Python, Java, BASH, MBScript, C, MIPS Assembly, RISC-V, LaTeX, Git

Technologies: Azure, Linux, Windows

Domains: Machine Learning, Logical Agents, Algorithm Analysis, GIS, Systems Programming, Digital Signals and Processing

Languages: English (Native), Standard Arabic (Professional), Saudi Arabic (Professional), Darija (Native)

Paradigms: Object-Oriented Programming (OOP), Parallel Processing, Procedural, Logic

Algorithmic Paradigms: Decrease and Conquer, Divide and Conquer, Greedy, Dynamic Programming

Mathematical: Tensor Calculus, Multivariable Calculus, Linear Algebra, Mathematical Modeling, Probability and Statistics, Discrete Structures, Real Analysis

Coursework: Data Structures & Algorithms, Algorithm Analysis, Systems Programming, Digital Electronics and Digital Signal Processing, Artificial Intelligence, Simulation and Modeling, Computer Organization & Architecture, Object-Oriented Design, Applied Calculus, Calculus 2, Multivariable Calculus, Vector Calculus, Real Analysis, Linear Algebra, Advanced Linear Algebra, Probability and Statistics, Differential Equations, Discrete Structures, Introduction to Data Science, General Physics I, General Physics II.

Transferable Skills

Leadership: Led diverse teams to deliver high-quality results, demonstrating strategic vision and inspiration

Communication: Mentored 50+ students, simplified concepts, and secured funding through compelling pitches

Project Management: Directed large-scale projects with 314,000+ users, ensuring timely delivery and satisfaction

Problem Solving: Proved 600+ mathematical propositions, showcasing advanced analytical and logical skills

Awards

- **Recipient, Ignite Grant (\$4,000)** – Mount Allison University Entrepreneurship Program Awarded funding to design and prototype a minimalistic medical assistance device leveraging AI and embedded systems. Key aspects:
 - **AI-Driven Solution:** Designed a concept for a Raspberry Pi-powered device capable of recognizing medical issues through voice interaction and providing step-by-step instructions in text and audio
 - **Data Science Integration:** Initiated research into appropriate medical datasets, as well as synthesis methods, to train AI models for accurate identification and response recommendations
 - **Embedded Systems Prototype Design:** Planned the hardware architecture, including sensors, rechargeable power systems, and minimalistic display components for user interaction
 - **Cost Optimization:** Evaluated hardware alternatives to balance performance and cost, including the feasibility of Raspberry Pi Zero 2 W and or Pi Pico for scalable production
- **3rd Place Winner, The Pitch Competition (\$1,000)** – Mount Allison University Secured recognition for presenting a scalable solution bridging AI and healthcare. Key accomplishments:
 - **Algorithm Design:** Highlighted the potential for Computer Vision (CV), natural language processing (NLP), and decision tree algorithms to conduct diagnosis
 - **Technical Feasibility:** Showcased a draft plan in hardware-software integration, detailing a roadmap for prototyping and development
 - **Innovative Impact:** Conveyed how the device could provide critical assistance in emergencies, ensuring accessibility and reliability

Accomplishments

- **Global eSports Excellence:** Top 100 Global Ranking Achievement in League of Legends (EUW) in Season 3
 - **Exceptional Global Ranking:** Achieved a prestigious top 100 position among over 70 million *active monthly* players globally, placing in the unparalleled 0.000001% of competitive players—a testament to an extraordinary level of discipline and ambition that few can attain
 - **Strategic Mastery:** Exhibited exceptional split-second decision-making and strategic acumen in high-pressure competitive environments, consistently outmaneuvering professional-level opponents through a relentless pursuit of excellence
 - **Strategic Innovation:** Pioneered adaptive gameplay strategies and meta-defining approaches, consistently pushing the boundaries of competitive play to maintain an extraordinary advantage over peers in one of the most challenging environments in eSports
 - **Competitive Success:** Dominated multiple tournaments, securing numerous 1st place victories and consistently achieving top 3 placements, underscoring sustained excellence in a field where only the most dedicated thrive
- **Directed, managed, and developed significant projects** – Led Development of Three Major Open Source Projects
 - **Market Success:** Built and maintained a community of 314,000+ active subscribers across platforms and 1.3+ million unique visitors, demonstrating strong product-market fit
 - **Quality Assurance:** Achieved 92-95% positive user ratings through rigorous quality control and continuous improvement
 - **Team Management:** Led and coordinated distributed teams of volunteers across multiple years, ensuring consistent quality projects delivery
 - **Technical Implementation:** Architected and deployed complex systems including custom gameplay mechanics, asset management, and Open Source Projects
 - **Project Scalability:** Successfully maintained and expanded three separate gaming projects simultaneously while ensuring consistent quality