

Ryan Haghi

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SKILLS

Software: Python, HTML, C, C++, LaTeX, Fusion 360, SOLIDWORKS, AutoCAD, MS Office, Premiere Pro, Photoshop

Hardware & Fabrication: Raspberry Pi, Arduino Nano, Soldering, Circuit Design, 3D Printing

PROJECTS AND EXPERIENCE

Founder and President, 2026 - Present

Queen's Nuclear Engineering Team, Kingston, ON

- Established and chartered a new engineering design club at Queen's, hiring 13 executive members with over 50 general members within 6 months.
- Designed, built, and maintained the QNET website end-to-end, including SEO optimization and Google Search Console integration, alongside managing all social media content and growth.
- Directed cross-functional team workflows across multiple academic years, mapping out project milestones for technical tracks including a Nuclear Cleanup Rover, an SMR Cooling System, and Gamma Ray Imaging.
- Managed the curriculum development and launch plans for QNET School, an onboarding program covering nuclear and engineering fundamentals for incoming general members.
- Secured \$2,000+ in sponsorship funding independently through a targeted outreach campaign to ~80 companies, grant applications, and a tiered sponsorship package (Kinetic/Thermal/Fission/Fusion).

Mechanical Engineer Co-Op, 2026 – Present

BayPath Inc., Richmond Hill, ON

- Executed project management across 15+ overlapping GTA projects, conducting on-site visits and delivering site review reports for HVAC and plumbing retrofits to stakeholders and contractors.
- Prepared engineering drawings in AutoCAD and generated CCDC standard construction contract documents and LOIs (Letters of Intent) to support project bidding, procurement, and client approvals.
- Authored comprehensive technical reports distributed directly to contractors and property management stakeholders to guide high-level operational and financial decisions.
- Completed and submitted 150+ EWRB reports for a portfolio of condo corporations, populating gas, hydro, and water data through ENERGY STAR Portfolio Manager.

APSC Design Projects, 2025

Queen's University, Kingston, ON

- Collaborated directly with the Canadian Space Agency to design, manufacture, and test a custom end-effector for a 3-DOF robotic manipulator to simulate automated vegetable harvesting inside a controlled lunar greenhouse testing environment.
- Programmed a custom Raspberry Pi Pico system, applying forward and inverse kinematic calculations to determine joint constraints.
- Designed and built a functional prototype incorporating electronic circuits to raise awareness of urban light pollution, modeling, soldering, and testing for power efficiency and reliable performance.
- Produced structured technical reports and design documentation across both projects to support team decision-making and stakeholder communication.

EngLinks Personal Tutor, 2025 - Present

Queen's University, Kingston, ON

- Provided one-on-one tutoring to first- and second-year engineering students in Calculus I & II and Physics I

EDUCATION

Queen's University - Candidate for BSc Engineering Physics,

R.H. Clark Applied Science Centennial Scholarship, 3.61 cGPA, (Dean's Scholar)

King City Secondary School - Ontario Secondary School Diploma, French Immersion Certificate