
Education

- **École Secondaire Catholique Père-René-de-Galinée** (Class of 2018)
[Cambridge, ON] Fully french education, earning IB certificate.

Publications

- Charging Cavaliers Research Team. “Search for isolated fractionally charged particles (FCP) using CERN’s 10 GeV/c proton beam and fixed target.”; *Under Review*; Institute of Physics IOP (2018).

Awards and Certificates

- 2nd place, **International Autonomous Robot Racing Challenge** (2017)
As the only high school against international universities from Canada, US, India, Thailand...
- **International Baccalaureate Middle Years Programme Certificate and Attestation** (2015)
Received attestation for participating in the 4 year program and the certificate for passing the online examinations (only top quintile of my cohort).
- **CERN’s Beamline for Schools** (2017)
We were the first team from the western hemisphere to win this international competition.
- **IB Award for Scientific and Technological Innovation** (2015 & 2017)
Awarded for my contribution in building my school’s STEM infrastructure (leading physics team, starting the first-ever robotics & engineering teams, etc.) and inspiring the younger students.
- **University of Ottawa Maker Award** [declined] (2018)
Valued at \$49 000
- **University of Ottawa President’s Award** [declined] (2018)
Valued at \$30 000
- Certificate of **Bilingualism** (2015)
- IB MYP **Best Personal Project** — awarded for my first autonomous robot project (2015)
- Bronze Cross & **Emergency First Aid** Certification (2014)
- Honour Roll (every year)

Current Involvements

- **Charging Cavaliers Particle Physics Team**, Member (since 2016)
Currently working on data analysis of our T9 Beamline experiment at CERN.
- **Cavalier Robotics Team**, Founder & Leader (since 2016)
- **2nd Physics Team**, Leader (since 2017)
- PRDG **Student Council**, Treasurer (since 2017)
- PRDG **Humanitarian Committee**, Member (since 2017)
- PRDG **Squash Team**, Cofounder & Leader (since 2016)

Personal Interests

- Squash and Table Tennis
- Languages (English, French, learning Egyptian Arabic)
- Electronics & Programming (computer vision and autonomy)

Skills

- Main programming languages: Python & C++
- Mechanical: soldering, etching PCBs, electronics
- 3D design: most Autodesk software
- Linux (Debian, CentOS, ...), Windows, Unix
- Programming applications: computer vision, voice recognition, micro-controllers, websites, web scraping/parsing, particle physics data analysis...
- Engineering project leadership

References

*available upon request