

DAVID RENE

HONOURS MATHEMATICAL PHYSICS

333 LESTER ST., APT 403
WATERLOO, ON, N2L 3W6

DAVRENE11@GMAIL.COM
(581)9864960

SUMMARY OF QUALIFICATIONS

- College degree in **computer science** and mathematics.
- Working Experience in **Python, JavaScript/TypeScript, CSS, HTML, Java, MATLAB, C#, R**.
- Experience working with frameworks such as **Node.js, React, Tailwind, REST, Blazor** and database frameworks such as **Prisma** and non-relational databases.
- Fluent in French and German, intermediate in Spanish and beginner in Mandarin.

EDUCATION

B.Sc. Honours Mathematical Physics

Minor in Astrophysics and minor in German, University of Waterloo, Ontario, September 2018 – May 2023

- Relevant Courses: Partial Differential Equations, Computational Physics, Advanced Ordinary Differential Equations, Thermal Physics

College Diploma in Computer Science and Mathematics

Specialization in tutoring, Limoilou CEGEP, Quebec, September 2016 – May 2018

- Relevant Courses: Computer Science: Database and Structure management, Interface creation and management, Project management (Agile method)

PROJECTS - [GITHUB.COM/DRNEUW](https://github.com/DRNEUW)

Computer Science

- **SpaceApps 2019:** Made an algorithm based on mode decomposition of data to detect anomalies and outliers in any geographical data (collected at more than one location). Won 1st place in Canada for this challenge.

WORK EXPERIENCE

Data Scientist/Cloud computing

Shared Services Canada, Jan. 2022 – Present

- Web development in .NET with Blazor for the creation of a government wide data-science platform made to interface between scientists and cloud providers (especially Azure, GCP, AWS).

Canadian Space Agency, Jan. 2021 – Aug. 2021

- Manage and provide an analysis of data collected by satellites SCISAT-1 and Alouette through a web application. Geographical analysis as well as chronological analysis.

Geomagnetic Network Developer

Natural Resources Canada, Sept. 2021 – present

- Maintain and develop a network used for the acquisition of data in a study of the effects of the Ottawa light rail train on the local geomagnetic field.

Mathematics Teaching Assistant

University of Waterloo, Sep. 2020 – Dec. 2020

- Created solutions, answered student questions and assessed student performance for the courses *MATH227: Calculus 3 for Honours Physics* and *MATH218: Differential Equations for Engineers*.

VOLUNTEERING

University of Waterloo

- Orientation – Coordinator: In charge of hiring over 200 volunteers while also creating teams, scheduling the volunteers and hiring upper-tier volunteer positions for Science Orientation

Clubs

- Science Society Vice President Finances – Winter 2022: Assist in all finance related tasks such as budgets, funding approvals, etc.