

# RONALD JUSTIN CARDONA

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## EDUCATION

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### Doctorat Génie Physique

*Polytechnique Montréal, Montreal, QC, Canada*

**Beginning: September 2023**

### BSc Honours Physics and Computer Science

*McGill University, Montreal, QC, Canada*

**May 2023**

### Diplome D'Études Collégiales, Science

*John Abbott College, Sainte-Anne-de-Bellevue, QC, Canada*

**May 2020**

## EXPERIENCE

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### TEAM Mentor

*McGill University, Montreal, QC, Canada*

- Recipient of the Tomlinson Engagement Award for Mentoring. Led tutorial sessions for PHYS 362 Statistical Mechanics at McGill University.

### Student Research Assistant

*McGill University, Montreal, QC, Canada*

[JAMScript](#)

- Distributed Computing using **JAMScript**. Formulation of edge computing waves as a method for controlling information propagation at the edge. Simulating and comparing edge waves to other information propagation techniques and studying compute and communication bandwidth usage.

### Student Research Assistant

*McGill University, Montreal, QC, Canada*

[OSCAR](#)

- Developing Radial Basis Function Interpolations (**RBF**) for cosmological models such as **ARES** and **21cmFAST**. This is also used with various optimization and machine learning techniques to provide better searching for appropriate cosmological parameters.

### Student Research Assistant

*John Abbott College, Sainte-Anne-de-Bellevue, QC, Canada*

[Inertial Sensing Lab](#)

- Developing neural network (NN) software to recognize handwriting made with accelerometers along with 3D modelling work to design chassis and other apparatus related to this. Creating pedagogical documents and exercises on kinematics and python programming through the use accelerometry.

## CERTIFICATIONS AND SKILLS

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### Languages

Fluent in English, French, and Spanish.

Basic Romanian

### DELF B2 Diploma

### Programming Languages and Systems

C/C++/C#, Python, Java, git, UNIX, OCaml

### Canadian National Lifeguard Certification

## EXTRA-CURRICULAR ACTIVITIES

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Over 15 years experience playing baseball, John Abbott College (2018-2019)

President of the John Abbott College Chess Club, 2019.