

Robert F. Archibald PhD

DATA SCIENTIST · ASTROPHYSICIST

Montreal, QC

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Summary

Currently a *Senior Data Scientist* in the Global Data Office at *Manulife*. I received my PhD in astrophysics from McGill University, where I studied some of the most extreme objects in the universe. Always open to exploring new fields & digging in to data.

Work Experience

Manulife

Montreal, QC

SENIOR DATA SCIENTIST

November 2019 - Present

- Reduced cost & compute time of stochastic market simulations by >90%, while satisfying the tight constraints of a heavily regulated industry.

Manulife / ICON Consulting

Toronto, Ont

HIGH PERFORMANCE COMPUTING SPECIALIST

September 2018 - November 2019

- Maintained **python azure sdk** tools to manage a large (~ 2000 vm) scalable compute environment for batch processing jobs.
- Developed a fully unit tested data validation / ETL tool that could parse & compare data from **COBOL** files, **SQL**, csvs, excel files, & more.
- **CI-CD** of **python dash** web apps to live monitor usage & costs.

University of Toronto

Toronto Ont.

POSTDOCTORAL FELLOW

September 2017 - September 2018

- Designed & implemented an automatic search of X-ray telescope data (~similar to video) to flag interesting, time varying sources in a many year, 100s of Gb dataset.

McGill

Montreal QC

RESEARCH ASSOCIATE, DOCTORAL WORK

May 2011 - August 2017

- Developed a **python** based software package to do near real-time analysis of on ongoing multi-year monitoring program of several objects
- Planned observing campaigns of many pulsars using space based telescopes to make efficient use of resources.
- Published 25 articles with > **700** citations in peer reviewed journals.

Education

McGill

Montreal, QC

PHD (PHYSICS)

June 2014 - October 2017

- Thesis Title: X-ray Timing of Young Pulsars; Supervisor: Prof. V. M. Kaspi

McGill

Montreal, QC

MSc (PHYSICS)

September 2011 - June 2014

- Thesis Title: An Anti-glitch in a Magnetar; Supervisor: Prof. V. M. Kaspi

Dalhousie University

Halifax, NS

BSc (PHYSICS)

June 2014 - October 2017

- Thesis Title: Factoring by Adiabatic Quantum Computation; Supervisor: Prof. J. Kyriakidis