Dalton John Ronan

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Education

Bachelor of Science with Specialization, Computing Science
University of Alberta | 2020 | GPA: 3.85

Bachelor of Science with First Class Honours, Astrophysics
University of Alberta | 2018 | GPA: 3.75

Work Experience

Teaching Assistant - CMPUT 301
University of Alberta, Department of Computing Science | September - December 2020

As a undergraduate teaching assistant for *CMPUT 301: Introduction to Software Engineering*, I supervised a team of 6 students through the development of an Android application. Throughout the semester I held weekly sprint meetings where I reviewed the progress the team made, answered questions, and provided feedback on their project to ensure they were following the best software engineering practices. I was also responsible for assessing and marking their deliverables, and answering the questions of any students during the weekly lab periods.

Customer Experience Representative
Indigo Spirit - Southgate Center | Oct 2018 - Present

As an Indigo employee, I work in a team-oriented and supportive environment to provide customers with the best experience possible. My primary responsibilities include keeping up with product knowledge, interacting with management and customers, receiving shipments, inventory stock-out, and handling and balancing cash.

Science Summer Camp Leader
University of Alberta, Faculty of Science | Summer's 2017-2020

As a summer camp leader I was responsible for working closely with other leaders to plan, organize, test, and implement a curriculum for Space Camps. During the camps, ensuring the safety of the 20 campers and other leaders during high risk activities (black powder rocket launches, liquid nitrogen demos) was top priority. In 2019, I took the role of Sr. Leader, assuming more responsibility for camp logistics and interacting with parents of campers. In 2020, in-person camps were cancelled due to the COVID-19 pandemic, and I was a 1 of 6 people hired to write and film online camps hosted on Coursera to provide online delivery of some of the camp materials.

Technical Experience

Languages   Python · C · Java · React(.js) · Node(.js) · Express(.js) · MongoDB · SQLite3

Software   Android Studio · Balsamiq · CASA · MESA · SPSS Statistics

Operating Systems   Linux · MacOS · Windows

Productivity   GitHub · LaTeX · Office/Google Suite

Projects

Responsible AI Design Assistant

Undergraduate Course Project, CMPUT 401 | University of Alberta | 2020

As a team of 6 students, I worked on the front-end development of a web application to serve as a self-assessment survey for deploying responsible AI systems. The app was developed for our client, AI Global, based off of questions and logic developed by their researchers, and is currently deployed and in use. Demo.

Radio Observations of Blazar TXS 0506+056

Undergraduate Research Project, PHYS 499 | University of Alberta | 2018

Working under the supervision of Associate Professor Sivakoff, I reduced VLA radio data of blazar TXS 0506+056 to create and analyze Spectral Energy Distributions and light curves to determine the blazar's spectral index and quantify its variability over the observation period. Project Paper.

Callysto Programmer

University of Alberta | 2018

I was employed by the Department of Mathematical and Statistical Sciences to help develop interactive Jupyter Notebooks as part of the CanCode Callysto project.

Coursework

Physics/Astronomy

Classical Mechanics · Quantum Mechanics · Optics · Electromagnetic Theory · Stellar Astrophysics · Galactic/Extragalactic Astrophysics · Physical Cosmology · Special & General Relativity · Upper Atmosphere & Space Physics

Mathematics

Calculus (Differential, Integral, Vector, Multivariate) · Differential Equations (Ordinary & Partial) · Linear Algebra · Complex Analysis · Applied Statistics · Formal Logic & Discrete Math · Linear Optimization

Computing

Computational Physics · Fundamentals of Computing · Programming Methodology · Software Engineering · Software Product Management · File & Database Management · Machine Learning

Achievements

Dean's Silver Medal in Science 2018

Vega Prize for Astronomy 2018

Alberta Golf Foundation Scholarship 2016, 2017

Eastern Irrigation District Scholarship 2016

Dean's Honour Roll 2014 - 2018

Golden Key Society 2014 - Present

Phi Theta Kappa Society 2013 - Present

President's Honour Roll 2013

Outstanding Student of the Year 2013

References

Cody Steinke

Engagement Associate (Camps & Outreach), University of Alberta

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Christina Gentleman

General Manager, Coles Southgate

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