# Sacha Perry-Fagant

# **ACADEMIC PROJECTS/COMPETITION**

## Master's Thesis, Niels Bohr Institute (2019-2020)

- Master's degree in quantum physics, specializing in high energy physics and cosmology
- Thesis: Myers-Perry Black Holes as Blackfolds

#### Undergraduate Research Project McGill (2017)

- Performed data analysis on brightest cluster galaxies to investigate the relationship between the magnitude gap and redshift of a cluster
- Python was used to classify the galaxies, carry out calculations, and plot the results.

#### McHacks (2018)

- Won second place in a competition using machine learning (neural network) to classify data
- Used OpenCV to process images and detect shapes

#### **EMPLOYMENT**

#### Smallbrooks – Software Developer (November 2018-Present)

- Working on Smallbrooks crowdfunding platform as a service
- Scala, Java, JavaScript, React, SQL, Elm, GraphQL
- Object oriented and functional programming

#### • Jonar – Software Developer (March-August 2018)

- Worked on Paragon ERP: cloud-based ERP software
- JavaScript frontend and backend
- Agile development using Scrum

## Distributed Digital Music Archives and Libraries- Software Developer (May-December 2017)

- Worked on an online application that allows users to automatically classify symbols.
- JavaScript frontend and Python backend
- Django, Ajax, jQuery

#### **SKILLS**

<u>Computer</u>		<b>Performance</b>
Proficient	Intermediate	
<ul><li>Python</li></ul>	<ul> <li>Machine Learning</li> </ul>	<ul> <li>Public Speaking</li> </ul>
• C#	• SQL	<ul> <li>Theatre Performance</li> </ul>
• Java	• C	<ul> <li>Classical Musical</li> </ul>
• Scala	<ul><li>Functional</li></ul>	Performance
• Latex	Programming	• Choir
<ul> <li>Mathematica</li> </ul>	• Bash	
<ul> <li>Adobe Premiere Pro</li> </ul>	• MIPS	
<ul> <li>Web development</li> </ul>	<ul><li>MATLAB</li></ul>	

- English (Native)
- French (Intermediate)