# Sigurður Helgason Computer Scientist

## **Contact Information**

Reykjavik, Iceland

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– Education	<b>Reykjavik University / MSc in Computer Science</b> August 2018 - Present, Reykjavik
	Currently attending RU for a Masters degree in Computer Science, GPA 9.1/10
	<b>Reykjavik University</b> / BSc in Computer Science August 2015 - June 2018, Reykjavik
	Completed the research based Computer Science degree with a GPA 8.9/10
	<b>Technical Academy / School of Information Technology</b> August 2011 - June 2015, Reykjavik
	Finished a combined highschool degree and Computer Science diploma
Experience	<b>Researcher &amp; Programmer / RU Fintech Center</b> January 2018 - Present, Reykjavik
	<ul> <li>Developed a blockchain platform for hosting digital certificates securely within a smart-contract, allowing students and potential employers to verify the authenticity of digital certificates.</li> <li>Developed in NodeJS, Go, and Python</li> </ul>
	<b>Teaching Assistant / Reykjavik University</b> Years 2017 - 2019, Reykjavik
	• Taught classes and helped students as a teaching assistant throughout my studies at Reykjavik University for the courses Algorithms, Computer Networks, and Artificial Intelligence
	<b>Programmer / Icelandic Customs Authority</b> Summer 2016, Reykjavik
	• Created the development methodology for the customs authority programming department introducing continuous development and an Agile workflow
	Student Council member / Technical Academy
	Years 2012 - 2013, Reykjavik
	<ul> <li>Assisted in managing events of the various groups in my highschool including programming competitions</li> </ul>

### Projects

#### BSc Final Project - ComboPal / PartiScope

Semester 2018

- Created a program Partiscope to automatically enumerate set partitions by breaking a combinatorial object down into its core components finding patterns and relations, resulting in a combinatorial specification and a generating function for the enumeration of the combinatorial class.
- Created a visualization tool for viewing the resulting combinatorial specification.
- The project was created using Python, Flask, and Javascript, available at combopal.ru.is

#### Dragnet / Artificial Intelligence

Semester 2017

• Developed a deep neural network to analyze water damaged documents written in cyrillic to apply optical character recognition, using tensor flow. The project was inspired by a document leak where many presidential documents had been thrown underwater in an attempt to discard them.

#### SeaDrone / Summer Project

Summer 2017

- Funded project by the Icelandic Government as well as the Bank of Iceland, for 20M ISK
- Assisted in the creation of a drone hull for sea
- Developed an artificial intelligence in C for navigating at sea, this was developed on a raspberry pi including the orchestration of the many sensors and sonar devices on board the drone
- Created a web interface for captains of shipping vessels to interact with the drone, the web interface was developed in NodeJS, and ReactJS