Þorgeir Auðunn Karlsson

Technical Lead & Co-Founder at Radiant Games

Website: https://www.thorgeirkarlsson.com/

Email: sir.thorgeir@gmail.com

I am a computer science enthusiast who enjoys teaching and practice water polo in my spare time.

I aspire to work on challenging and intriguing projects which have a positive impact on the world. I co-founded Radiant Games which produced a game that teaches children the fundamentals of coding through play. During my master's studies I applied deep learning to predict epidemic outbreaks through cellphone metadata.

EXPERIENCE

Radiant Games
January 2015 - Present

Technical Lead & Co-Founder

I served as the technical lead for our mobile game Box Island, a playful learning experience that sparks children's interest the fundamentals of programming and logic. The technical lead is responsible for all technical decisions and heads all programming efforts. Development of video games requires interdisciplinary work. As the technical lead my work is focused on software development and integrating different fields into the game.

Reykjavik University
August 2012 - June 2017

Teaching Assistant

2017 Programming Languages (T-501-FMAL)	2014 Databases (T-202-GAG1)
2017 Object Oriented Programing in C++	2014 Programming Languages (T-501-FMAL)
2015 Programming Languages (T-501-FMAL)	2013 Algorithms (T-301-REIR)
2014 Compilers (T-603-THYD)	2013 Web-Programming (T-213-VEFF)
2014 Introduction to Machine Learning (T-504-ITML)	2012 Programming (T-111-PROG)

Íslandsbanki
May 2011 - August 2013

Software Developer

Worked on maintaining and supporting existing internal platforms within the company. Worked 4 months during the summer, May to August.

EDUCATION

Emory University
June 2017 - Present

Research scholar. Applying deep learning to predict epidemic outbreaks through cellphone metadata.

Reykjavik University
August 2016 - Present

Master's Degree, Computer Science.

Independent study: Applied deep learning on predicting general game playing agents actions.

Reykjavik University
2011 - 2014

Bachelor's Degree, Computer Science.

Honors: Dean's List & Freshman's scholarship

My final project was to create a general purpuse role playing rule set that span many different role playing relms. I also took a 16 ects independent project to created an AI that could play any game that was build on this general rule set.

Technical College of Reykjavík
2008 - 2011

Computer Study Programme

Graduated with First Class Honors

PROJECTS

Predicting Epidemics Through Cellphone Metadata
June 2017 - Present

https://simbiosyslab.github.io/projects/dataScience-cdr

The goal of this project is to improve the state of the art in epidemic surveillance. It uses passively collected cell phone metadata as a near real-time source of behavioral markers. This projects builds on a dataset which links individuals phone data with verified diagnosis data.

Box Island
January 2015 - Present

https://boxisland.io/

Box Island is a fun logical puzzle game for both iOS and Android with a true focus on childrens' entertainment and engagement. Children journey with a family of boxes to find a lost baby box in a tropical wilderness.

Rex Diagnostics
2013 - Present

http://thorgeirk11.github.io/REX-Diagnostics/

I created a unity extension that enables expression evaluation at run-time to facilitate testing and debugging.

LANGUAGES

Icelandic (Native or bilingual proficiency), **English** (Full professional proficiency)

SKILLS & EXPERTISE

C#, Java, C++, C, Deep Learning, SQL, Agile Methodologies, Git, Game Development

PUBLICATIONS

Generic Universal Massive Multiplayer System
December 2013

Reykjavik University

This project was to create a general purpose role-playing rule set which could span many different role-playing relms. We believed that all role playing games had the same fundamental core mechanics and by analyzing and extracting that core we set out to develop a engine. This project was the founding idea behind the video game company Purple Odin.

I also took a 16 ects independent project to created an AI that could play any game that was build on this general rule set.