DANIEL HOLMBERG

Data Science Student

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EXPERIENCE

Helper

CodeRefinery

May 2020 - present

♀ Online

- Advancing research software development FAIRness (findability, accessibility, interoperability, and reusability) through CodeRefinery, a project within the Nordic e-Infrastructure Collaboration (NeIC)
- Participant of the June 2020 CodeRefinery instructor training in collaboration with Delft University of Technology
- Helper at the first online mega-CodeRefinery workshop, coderefinery.github.io/2020-05-25-online/#helpers

Developer

Fjuul Vision Oy

March 2020 - present

♀ Sofia Future Farm

- Part-time programmer for a fitness-tech company
- Learning software development best-practices
- Working in the cloud with Node.js and Google Cloud Platform

Technical Writer

Towards Data Science

October 2019 - present

♀ Freelance

Occasionally writing blog posts on data sciency topics

Research Assistant

University of Helsinki

• Assisted Dr. Antti Kuronen and Dr. Pekko Kuopanportti on the project Atomistic modeling of kinetics on surfaces and interfaces of iron-chromium alloys (AMKSIA) where I tested new interatomic potentials for the alloys using molecular dynamics simulations

Teaching Assistant

University of Helsinki

March - May 2018, 2019, 2020

♀ University of Helsinki

• Helped students with their homework in the bachelor's course on special theory of relativity

EDUCATION

M.Sc. Data Science

University of Helsinki

2019 - present

B.Sc. Physics

University of Helsinki

2016 - 2019

- Thesis title: Interatomic Potentials for Simulating Fe-Cr
- GPA: 4.3/5

Matriculation Examination

Ekenäs Gymnasium

2013 - 2016

• Laudatur, top 5%: Chemistry, English, History

ORGANIZATIONS

Writer, Social Media Manager

Spektrum rf

2019 - 2020

- Writer for our student paper
- · Keeping members up to date on social media

Sports Official

Spektrum rf

2019

Organized bi-weekly student sports events

Vice-Chairman

Nyland Brigade Conscript Committee

• Responsible for questions related to studying, arranged working life events and a study fair with universities and polytechnics

SKILLS

Python R Git Jupyter JavaScript Docker Bash **MATLAB** Fortran

Data Analysis **Technical Writing**

EXPERIENCE

Tutor

Uplus Yksityisopetus Oy

🛗 January 2017 - May 2018

Helsinki

 Private teaching in mathematics, physics and chemistry in the Helsinki region

Substitute Teacher

Ekenäs Gymnasium

Ctober 2016

Raasepori

• Taught mathematics and physics to high schoolers

Summer Staff

Premarin Oy

2012 - 2017

Raasepori

 Outdoor work consisting mostly of facility management and caring for boats

PROJECTS

Atmospheric Aerosol Modeling

Data science with INAR

• A couple of fellow data science students and me predicted aerosol concentrations with the University of Helsinki Institute for Atmospheric and Earth System Research (INAR) using different machine learning algorithms.

% github.com/deinal/aerosol-modeling

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Jupyter, Python, R

Infinite Al

Demola Global student project

• We as a team of students from China and Finland addressed the AI control problem in co-operation with Demola Global. Our findings are published on the webpage below.

% aisafety.netlify.app

</> HTML, CSS

Kodanka

Teach programming in Swedish

- Started a project to teach programming in Swedish with a group of friends (a work in progress)
- Open source and licensed under Creative Commons Attribution-NonCommercial-ShareAlike

% kodanka.fi

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Jupyter, reStructuredText, Python

SCHOLARSHIPS

- HU Study Grant, J. Pippingsköld and F. J. Wiik fund, 1000€, 2020
- HU Study Grant, W. Brenner and R. Donner fund, 800€, 2019
- Scholarship from the Swedish Cultural Foundation, 600€, 2019
- Scholarship from Sophie von Julin's foundation, 1000€, 2019
- HU Study Grant "to undergraduate students of mathematics and natural sciences whose academic performance has been excellent", 1000€, 2018

LANGUAGES

Swedish	•••••
English	••••
Finnish	••••
German	•••••

CODE

Discord Bot

Adding features to an online forum

 Automating and adding features to a Discord server using a bot running in the cloud

Spektrumrf.github.io/bot </> Python

Lyrics Generator

Data science intro project

- Generates random lyrics based on Spotify global top 200 songs
- Uses a recurrent neural network Python library working on top of Keras/TensorFlow

% lyrics-gen.herokuapp.com </> Python, HTML, CSS

Mobile Apps

Android applications for my student association

 I created an app for my student association to fetch the university lunch menu and as a handy way to reach our songbook on occasion

play.google.com/store/apps/ developer?id=deinal
React Native, Google Firebase, Java

Integer Recognition Scientific computing coursework

• Implemented singular value decomposition for recognizing images of integers

sithub.com/deinal/svd-pattern-recognition /> MATLAB

HOBBIES

- Played forward in Spektrum FC, Unisport Futsal Series 2019-2020
- Ran as anchor in the Jukola Orienteering Relay 2019
- Ran Helsinki Half Marathon 2019