William Högman Rudenmalm

Stockholm, Sweden +46 70 263 86 33 me@whn.se http://whn.se

I've always had a passion for programming, not because I enjoy working with computers by themselves. Rather, I enjoy building systems that provide some meaningful value to the end user. I'm a firm believer in the concept of humans being more important than hardware.

I tend to work the best in environments where employees are given a lot of creative freedom. To me, getting to be creative makes my work feel much more fulfilling. I also prefer working with people who are as enthusiastic about making amazing products as I am.

Technical Skills

Like:

python, javascript, clojure, linux, go, scala, html5, machine-learning, statistics

Experience

Developing Data processing tools - Aging Research Center, Karolinska Institute

May 2012 - June 2012

I created a tool for reading files from processing data in a functional MRI brain imaging study. The tool included reading the e-prime proprietary format, calculating timings for functional MRI brain imaging and exporting these to the CSV format.

Working on this project taught me that the biggest engineering challenges stem from integrating with other systems rather than the business logic itself. It also taught me more practical things such as creating good parsers.

Developing software for fNIR data processing – Department of Psychology, September 2012 - December 2012 Stockholm University

fNIR stands for functional near-infrared spectroscopy, which is an optical brain imaging technique.

I developed a software solution for taking obtained raw-data and transforming it to something that is useful to researchers. This includes applying filters to remove artifacts in the signal such as the subject moving and the subject's pulse. I very much enjoyed to work on this project because the I find the domain very interesting.

Developing a micro-expression training tool – Department of Psychology, Stockholm *February 2013 - March 2013* University

Micro-expressions are brief facial expressions, lasting about a quarter of a second. They are a sort of emotional leakage that is found when we try to hide our true facial expressions.

For this project, I'm developing a complete solution for training the participants to detect Micro-expressions. The primary technical challenge that I had to overcome in this project was ensuring that the time for which the facial expressions are displayed is very precise.

Education

B.S. Psychology (in progress) – Stockholm University

2010

I wrote my bachelor's thesis on the effects of aging on face perception. The work resulted in my co-authoring a paper, which is to be presented at the European Congress of Psychology 2013, in Stockholm. I will graduate with this degree once I complete my minor in Computer and Systems Sciences, at the end of the spring semester of 2013.

B.S. Computer and Systems Sciences (in progress) – Stockholm University

2012 - 2013

I'm currently pursuing a bachelor's degree in Computer and Systems Sciences at Stockholm University. While I have quite a lot of prior experience with programming, but I've gotten to learn quite a bit about other aspects of Software Engineering. I'm looking forward to writing my bachelor's thesis in the fall semester of 2013.

Projects & Interests

GitHub - NodeRunner—https://github.com/williamhogman/noderunner python, javascript

October 2012

A Node.js interoperability module for Python. NodeRunner allows the user to call node.js functions in Python, and get the return values as Python objects.

I created NodeRunner because I needed it for a personal project. It has provide immense value for on many of my personal web projects since.

GitHub - fsbbs – https://github.com/williamhogman/fsbbs javascript, python, redis

February 2012

Fast forum software using Python and Redis

I built the fsbbs forum software, to showcase how performant a web application can be given the right design decisions.

 $\label{lem:compsychopy} \textbf{GitHub - PsychoPy} - \text{https://github.com/psychopy/psychopy} \\ \text{javascript, python, redis}$

September 2010 - March 2013

Software for creating psychology experiments using Python.

I've been a contributor to PsychoPy since early 2011. My contributions have been been focused on improving the usability of the photometer component.

GitHub - QuickerAuth—https://github.com/williamhogman/quickerauth python, html5, javascript, http, security

February 2012 - July 2012

Streamline mobile application authentication with QuickerAuth

I wrote QuickerAuth as a way of transfering credentials between desktops and mobile devices. QuickerAuth works by displaying a QR code in the desktop browser which is then scanned using the mobile app. The QR-code, once scanned gives the user access to his or her account.