# **Zachary Hart**

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OBJECTIVE

Seeking a co-op in software engineering for the Summer of 2017.

EDUCATION

## Rochester Institute of Technology - Rochester, NY

August 2015 - Present

- Major: B.S. Computer ScienceExpected graduation: June 2020
- Relevant Coursework: Data Structures & Algorithms, Mechanics of Programming, Intro to Software Engineering, Concepts of Computer Systems

### Projects

## **CSH Lounge Automation**

http://github.com/zthart/csh-automation

Aggregates control of consumer devices such as A/V receivers, projectors, and lighting control and implements **X10 Automation**, **HDMI-CEC**, and serial communications to interface with the devices. The devices are exposed to web requests via **Python/Flask** application in order to allow control from any internet enabled device.

#### Drink

http://github.com/zthart/drinkpi

A collection of web-connected vending machines that allow users to vend items from any device connected to the internet. Worked on a diverse team to maintain, update, and discover new approaches to interface mechanical machines with modern hardware via the **one-wire** protocol, and a **python** server/client model.

## **Huffman Lite**

http://github.com/zthart/huffman-lite

Written in **C**, Huffman Lite is a huffman-like encoding and compression algorithm. Utilizing a tree structure similar to a huffman tree, Huffman Lite can encode and decode both human readible files and binary files.

## Healthnet

A responsive webpage built using the **Django** web framework to allow doctors, patients, and nurses to interact and share pertinent medical information, manage prescriptions, and schedule and manage appointments throughout their office, hospital, or across a network of institutions.

## EXTRACURRICULAR

## CSH (Computer Science House)

House Improvements Director Drink Administrator Member http://www.csh.rit.edu/ August 2016 - Present

March 2016 - Present August 2015 - Present

Computer Science House, or CSH, is a group of technically-minded students at the Rochester Institute of Technology that all share a goal of learning and creating through collaboration. Members past and present have been responsible for creating many projects that have seen incredible success at RIT, as well as in the public space.

TECHNICAL SKILLS

Languages Java, Python, C Frameworks Flask, Django

Operating Systems Linux, Windows

**Technical Skills** 6502 Assembly, General Digital Electronics, Hardware Prototyping, Home Automation