# Zachary Weeden

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# **EDUCATION**

# ROCHESTER INSTITUTE OF TECHNOLOGY

BS IN COMPUTER ENGINEERING

**TECHNOLOGY** 

May 2018 | Rochester, NY Accolades: Dean's List Spring 2016

#### LINKS

#### Personal Website:

https://zweeden.dev

Github:

https://github.com/zweed4u

LinkedIn:

https://www.linkedin.com/in/zweeden

# COURSEWORK

DC/AC Circuits • Microcontroller Systems
Electronics • Object-Oriented Programming
Digital Signal Processing • Data Structures
Computational Problem Solving
Computer Science Theory
Digital Fundamentals & System Design
Networking Technologies
Hardware Description Language
Embedded Systems Design I & II
Real Time Operating Systems

#### SKILLS

#### PROGRAMMING/SCRIPTING

Python • Go • PHP • C • Bash

C++ • Powershell • VHDL • Javascript

#### **IDES. SOFTWARE & FRAMEWORKS**

PyCharm • PHPStorm • GoLand • Eclipse
Visual Studio • Selenium • Flask • Django
openQA • pytest • PHPUnit • Codeception
mypy • pipenv • poetry • black • pydantic
PyQt • Git • Gitlab Pipelines • Jenkins • Jira
Docker • Kubernetes • Openstack • Packer
virt-builder/libguestfs • Ansible • Vagrant
prometheus/node\_exporter • KVM • libvirt
ESX • Hyper-V • VSphere • Doxygen • OpenCV
redis • Vivado • MultiSim • QSYS • ModelSim
Linux • QNX Neutrino • ReportPortal • Swagger
cloud/base-init • qTest • PostgreSQL • Apache
Fail2ban

#### **EXTRACURRICULARS**

Hack The Box Penetration Labs - <u>Profile link</u>
Automating limited item online shopping experience
2011 Varsity Baseball - RIT Tigers Men's
Intercollegiate Varsity Baseball Team

## **EXPERIENCE**

#### **DATTO INC.** • SOFTWARE ENGINEER

May 2018 - March 2020 (Full-Time) | Rochester, NY

- Sprinted as a software engineer on the BCDR Engineering Productivity team.
- Developed internal tools to ease manual testing efforts, reduce RC cycle time and provide developers & users with configurable environments.
- Developed test automation frameworks and respective automated tests for core products and other development teams.

June 2017 - January 2018 (QA Automation Infrastructure Intern - Co-op) | Rochester, NY

- Wrote automated tests utilizing a page-object model for UI and frontend testing
- Developed Django web app which interfaced with our Openstack cluster.
- Automated the process of creating sysprepped images to be used on Openstack

May 2016 - December 2016 (QA Engineer Intern - Co-op) | Norwalk, CT & Rochester, NY

- Led software development on a team with 2 other interns for LED alert/email system project
- Manually tested Sharepoint/Office365 integration with SaaS product, Backupify
- Utilized OpenOA (Perl + needles) and Laatu to automate Backupify testing
- Leveraged pytest to develop API validity tests and wrote wrappers around API endpoints for use in Core Products test framework

#### **SELF EMPLOYED** • RESELLER/CONSULTANT

September 2011 - Present | Rochester, NY & Middleton, MA

- Automate online retailers' checkout process to ensure purchase of limited items which are sold for profit on eBay
- Assist others with successful purchases organically amassed over 7000 followers on <u>social media</u> under a pseudonym where I offered free help/advice and information

## **PROJECTS**

# NANOSTACK | DATTO INC. SOFTWARE ENGINEER

October 2018 - March 2020 | Rochester, NY

- Built Go program, platform and infrastructure to supersede Openstack.
- Conceptualized and designed controller/compute node relationship and architecture
- Provided first class support for local disk storage, noVNC URLs without authentication over websocket, supported the ability to add disks to existing instances and allowed specific libvirt xml on a per instance basis
- Base images were built, sysprepped and uploaded to controller nodes

 $\textbf{Technology used:} \ \textbf{Go, Libvirt, Postgres, Vagrant, Ansible, Packer, Virt-Builder, Cloudinit, Windows, Linux \\$ 

#### **QAPI** | DATTO INC. SOFTWARE ENGINEER

September 2017 - March 2020 | Rochester, NY

- Built Django application to serve as a user friendly interface to nanostack.
- Provided users with the ability to create and manage VMs for manual and automated testing

**Technology used:** Python, Django, Redis, Grafana, Swagger, Mypy, Black, Poetry, Pydantic, Docker, Kubernetes, Slack Webhooks, CI/CD pipelines

#### AUTONOMOUS ROVER | RIT STUDENT, GITHUB, DEMO

March 2018 - April 2018 | Rochester, NY

- Built and developed firmware, software and test benches for an autonomous rover
- Lead software engineer of 1st place winning autonomous maze traversal rover at Imagine RIT 2018
- Featured on krktl, board manufacturer's, blog

**Hardware used:** krktl snickerdoodle, rover 5 chassis, 3x Ultra sonic sensors, 1x IMU **Technology used:** VHDL, Vivado, Altera ModelSim, C, Python, PyQt, Flask, Matplotlib, OpenCV

#### SUPREME | PERSONAL, GITHUB

March 2016 - Present | Rochester, NY

- Built Python script to automate purchase of limited items on Supreme NYC web shop
- Made use of iOS application's endpoints for speedier checkout

Technology used: Python, Mitmproxy, Pipenv, Shopify, Requests, Selenium, PyQt