Griffin Staples

Toronto, ON | 613-328-7595 | griffinstaples@gmail.com

Github: github.com/griffstaples
LinkedIn: linkedin.com/in/griffinstaples

Skills Summary

Python, Javascript, C/C++, Git, NextJS, NodeJS, Jest, Postman, Arduino

Education

Bachelor of Engineering: Engineering Physics / 2020
GPA of 3.86, Dean's Scholar 4 years consecutively

Relevant Courses
High Performance Computing, Neural Networks and Genetic Algorithms, Mathematical Methods,
Mechatronics Engineering, Engineering Design Thesis, AICamp End to End Computer Vision,
Computational Engineering Physics, Udacity Artificial Intelligence Nanodegree

Experience

Properly Inc
Intermediate Software Developer / Sept. 2021 – Nov. 2022

- Full-stack development using NextJS (React), Python, and AWS Services
- Developing internal tools and building out new product features from front-end to back-end
- Leading front-end guild meetings
- Supporting technical change initiatives such as Typescript

MacDonald Dettwiler & Associates Ltd.
Junior Member Technical Staff – Software Development / Jan. 2021 – Sept. 2021

- Developed React/Redux GUI for control of International Space Station based centrifuge (MicroPREP)
- Supported design of ground and flight network architecture for CanadaArm3

Royal Military College of Canada
Research Assistant / May – Sept. 2020

- Designed, programmed and manufactured flight avionics system for a single-bladed helicopter (mono-copter) based on Arduino (C++)
- Developed the Bluetooth live data acquisition system for the mono-copter (Python)
- Built out an engine and propeller model in Python to more accurately estimate aircraft performance
- Played a significant role in completing the automation of wind-tunnel data acquisition process, shaving off approximately 2 hours of human work per run

ResponsiveAI
Full-Stack Developer Intern / May 2019 – May 2020

- Self-taught Javascript and related frameworks – NodeJS, MongoDB, VueJS, AngularJS – on the job to build out UI features and backend processes
- Developed the new client-facing KYC, one of the first interactions our software has with clients, from front-end to back-end
- Implemented new API's including DocuSign and Amazon SES
- Wrote unit-tests for our document signature service using Jest

Cryptocurrency Trader (Personal Project)
Creator / Sept. 2019 – 2021

- A personal project built in Python using Binance's API to trade arbitrary cryptocurrencies with various strategies
- Makes use of Tensorflow/Keras to make predictions about currencies price movement

Design of a New Blood Pressure Monitor (Academic Project)
Author and Developer / Sept. 2018 – May 2019

- Performed extensive literature review and authored thesis paper on the creation of a new lightweight, and affordable blood pressure monitor
- Analyzed open-source PPG biosignals with Python and made use of Keras to predict blood pressure from biosignal characteristics

Autonomous Air Hockey Player (Academic Project)
Lead of Software Team/ Sept. 2018 – Dec. 2018

- Created a simulation environment in C++ to evaluate computer strategy algorithms against a human player at scale
- Collaborated with team members to integrate software with Arduino and third-party computer vision module (PixyCam)

Wind Turbine Design Project (Academic Project)
Team member / Sept. 2018 – Dec. 2018

- Designed and manufactured the generator for a phone-charging wind turbine using Onshape
- Simulated expected power generation using 2D Magnetic modelling software

dPoint Technologies
Inventory Control and Machine Operator / July 2017 – Aug. 2017

- Tested and helped troubleshoot successive iterations of company fuel cells
- Trained new employees at the fuel cell testing station
- Designed fuel cell testing jig for reducing time spent switching machines

Awards and Acknowledgements

Dean's Scholar – Queen's University Sept. 2015 - May 2020
Received for maintaining a GPA greater 3.5 while taking 16.1 units or higher.

Best Use of Machine Learning in Banking – QHacks Hackathon Queen's University Feb. 2019
Our hackathon team developed a SMS based budgeting app using NodeJS/MongoDB and the Twilio API for users to keep track of their spending while offline.

Queen's University Excellence Scholarship – 2015
Received for academic excellence exhibited as an incoming student to Queen's University