### **EDUCATION** B.S. in Mechanical Engineering, June 2016

Drexel University, Philadelphia, PA

GPA: 3.86

## COURSES Software: Advanced Programming Techniques, Data Structures and Algorithms

Engineering: Controls, Finite Element Methods, Fluids, Materials, Thermodynamics

## CERTIFI-CATIONS

• Reinforcement Learning (Coursera Specialization, 2019)

• Industrial Internet of Things Pipeline (Lockheed Martin Pipeline Course, 2018)

### SKILLS

#### **Programming Languages**

• Python, Perl, Bash, C++, C, JavaScript, MATLAB

### **Development Operations Tools**

• Nexus Repository Manager, Docker, AWS, Jenkins, TestRail, Rundeck, Microsoft TFS Software Development Tools

• Git, Vim, Sphinx, Selenium, BDD Tools (Cucumber, Behave)

## **Software Packaging Tools**

• RPM, setuptools (Python), npm, MSBuild, NuGet, Chocolatey

### **Engineering Tools**

• ANSYS, Creo, MakerBot 3D printing, Minitab, LabVIEW, LATEX

## EXPERIENCE

#### The Stratagem Group | King of Prussia, PA

Software Engineer Senior

August 2019 - Present

- Create and maintain Python program to export TestRail project data into an XML file and import into a remote TestRail instance utilizing REST API calls
- Develop automated testing prototypes utilizing JavaScript Cucumber test framework and Selenium web drivers
- Present custom software tools at conferences and product demos to various product stakeholders

#### Lockheed Martin, Space Systems Company | King of Prussia, PA

Software Engineer

April 2018 - August 2019

- Automated processes to install, configure, and test software as part of an agile development team
- Implemented a process to create environment-specific packages from a template, reducing source code
- Communicated with test users to help identify and resolve product defects
- Wrote and improved code for a Java project to simulate test scenario events

## Associate Software Engineer

September 2016 - April 2018

- Maintained software archives in Nexus via RESTful API modules written in Perl
- Supported weekly product deployments to a factory test level environment
- Developed and improved End-to-end tests using Selenium and C#
- Configured SSL/TLS certs for web services and applications

## Optical Diagnostics Lab, Drexel University | Philadelphia, PA

Hess Undergraduate Research Scholar

June 2015 - March 2016

- Monitored vibration on lab equipment with an accelerometer utilizing I2C communication protocol
- Designed circuit board to read data from accelerometer and temperature monitor
- Wrote Python script to process and upload data to Google Drive using Google APIs
- Developed data acquisition and control programs for oscilloscopes and temperature controlled lasers using LabVIEW

# Drexel University and Children's Hospital of Philadelphia | Philadelphia, PA Senior Design Team Member September 2015 - June 2016

- Optimized a laryngoscope blade to improve the success rate of pediatric intubation
- Developed and read input from sensors to detect pressure points on device
- Analyzed MRI scans of pediatric airway anatomy to determine optimal device curvature

## University City Science Center | Philadelphia, PA

Technical Investment Analyst

September 2014 - March 2015

- Collaborated with local institutions to transition biomedical research into marketable products
- Prepared and submitted grant applications through the National Institute of Health (NIH) and Small Business Innovation Research (SBIR) program

#### Essential Medical | Malvern, PA

Product Development Co-op

September 2013 - March 2014

- Built and tested over 500 vascular closure devices for sealing capability and functionality
- Wrote critical documents, including Assembly Instructions and a Verification Test Plan
- Conducted product experiments in an in vitro model and assisted in an in vivo study

# PERSONAL PROJECTS

 ${\bf SpotifyAPI\ Playlist\ Generator}\ |\ {\bf https://www.andygnias.com/spotify-playlist-generator/noise}\ |\ {\bf https://www.andygnias.com/spotify-playlist-generator/noise$ 

• Generates a Spotify playlist for a user from a text-based list of tracks

Secret Santa Selection Manager | https://www.andygnias.com/Secret\_Santa/

• Makes Secret Santa selections for a group, considering exceptions, and emails the assignments to participants via AWS Simple Email Service (SES)

# LEADERSHIP Phi Kappa Psi Fraternity | Philadelphia, PA & ACTIVITIES

- Chapter President October 2014 May 2015
- Scholarship Evaluator March 2017 Present
- Regional Officer Training Facilitator February 2020

#### Engineering Spring in Bochum, Germany | April - June 2014 | Bochum, DE

- Took classes with professors at Ruhr-Universität Bochum
- Assisted PhD candidates in a lab performing research on Phase Change Slurries (PCS)