PROFILE

Software engineer with extensive development, DevSecOps, and machine learning experience. Knowledge of multiple languages and frameworks, with a strong ability to think Pythonically. Skilled in automating DevSecOps processes, such as packaging, deployment, and End-to-end testing, for various enterprise programs. Passionate about code coverage and extensive documentation when developing new code.

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**

- Machine Learning Coursera Course, Stanford Online May 2020
- Reinforcement Learning Coursera Specialization, University of Alberta Feb 2020
- Industrial Internet of Things Lockheed Martin Pipeline Course Oct 2018

SKILLS

Programming Languages

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

Development Operations Tools

- Jenkins, TFS, Docker, AWS, Rundeck, Sonarqube, Nexus Repository Manager, TestRail Software Development Tools
- Git, Vim, Sphinx, Selenium, BDD Tools (Cucumber, Behave, SpecFlow)

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 - Machine Learning Role

March 2019 - Present

- Determine useful attributes among data for accurate classification
- Create algorithms for detecting different behaviors in incoming data streams
- Upscale docker-compose development network to enhance functionality and stability
- Develop methods for hyperparameter optimization utilizing Optuna

Software Engineer - Automated Testing Role

August 2019 - Present

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

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

Software Engineer

April 2018 - August 2019

• Automated software installation, configuration, and testing as part of an agile development team

- Reduced source code by implementing a process to create environment-specific packages from a template
- Communicated with test users to help identify and resolve product defects
- Supported weekly product deployments to a factory level test environment

Associate Software Engineer

September 2016 - April 2018

- Maintained software archives in Nexus via RESTful API modules written in Perl
- 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

- Wrote a Python script to monitor vibration on lab equipment using an accelerometer connected to a Raspberry Pi
- Developed data acquisition and control programs for oscilloscopes and temperature controlled lasers using LabVIEW

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) programs

Essential Medical | Malvern, PA

Product Development Co-op

September 2013 - March 2014

- Built and tested 500+ vascular closure devices for sealing capability and functionality
- Wrote documentation, 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**

Spotify Playlist Generator | https://andygnias.com/SpotifyAPI

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

Secret Santa Selection Manager | https://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 engineering classes at Ruhr-Universität Bochum
- Assisted PhD candidates in a lab performing research on Phase Change Slurries (PCS)