

PROFILE

Software engineer with extensive development and DevSecOps 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

**COURSE-
WORK**

Software Courses: Computer Programming (C++), Advanced Programming Techniques, Data Structures and Algorithms
Engineering Courses: Control Systems, Finite Element Methods, Computer Aided Design, Fluid Dynamics, 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

SOFTWARE

Languages

- Python, JavaScript (Node.js), C/C++, Perl, Bash, MATLAB

Operating Systems

- Linux (RHEL, Ubuntu), Windows

CI / CD

- Jenkins, GitLab, Microsoft TFS (Azure DevOps Server)

Application Development

- AWS, Docker

Testing

- Selenium, Cucumber, TestRail

Packaging

- Sonatype Nexus, RPM, Python setuptools, npm

Engineering Tools

- ANSYS, Creo, MakerBot 3D printing, Minitab, LabVIEW, L^AT_EX

EXPERIENCE **The Stratagem Group | King of Prussia, PA**

Software Engineer Senior - Application Framework & Infrastructure Program September 2020 - Present

- Define and implement program-wide DevSecOps pipeline that can build, test, scan, and deploy Java and C++ applications through GitLab
- Serve as scrum master for an agile development team of 8+ engineers

Software Engineer Senior - Automated Testing Program September 2019 - December 2020

- Created an AWS Lambda application to transfer TestRail project data into into a remote TestRail instance utilizing REST API calls
- Developed automated UI tests using Cucumber.js and Selenium to simulate user actions for over 40 different test scenarios
- Created automated test pipeline templates in Jenkins with "plug-and-play" usability

Software Engineer Senior - Machine Learning Program March 2020 - October 2020

- Determined useful attributes among datasets for accurate classification
- Created and improved applications interacting with data through Apache Kafka
- Hardened docker-compose development network to enhance functionality and stability
- Developed methods for hyperparameter optimization utilizing Optuna

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

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

Secant Medical | Perkasie, PA

Quality Engineering Co-op September 2012 - March 2013

- Validated internal test methods used to analyze various biomedical textiles
- Qualified equipment for proper installation and operational functionality (IQ/OQ)
- Wrote novel test methods that complied with USP (U.S. Pharmacopeia) standards

**LAB /
PROJECT
EXPERIENCE**

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
- Designed circuit board to read data from accelerometer and temperature monitor
- 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

Drexel University Implant Research Center | Philadelphia, PA

Lab Volunteer

April 2014 - June 2014

- Assisted in cleaning and preparing biomedical implants of the knee and hip for testing
- Performed photo-documentation on biomedical implants

**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 & ACTIVITIES **Phi Kappa Psi Fraternity | Philadelphia, PA**

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

Engineering Spring in Bochum, Germany | Bochum, DE

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