

PROFILE	Software engineer with 5+ years of development and DevSecOps experience. Knowledge of multiple languages and frameworks, with a strong ability to think Pythonically. Skilled in automating CI/CD pipelines for various tech stacks. Passionate about code coverage and extensive documentation when developing new code.	
EDUCATION	<b>Graduate Certificate in Computer Science, May 2023 (Expected)</b> Temple University, Philadelphia, PA GPA: 3.67  <b>B.S. in Mechanical Engineering, June 2016</b> Drexel University, Philadelphia, PA GPA: 3.86	
COURSE- WORK	<b>Graduate Courses:</b> Data Mining, Data Structures and Algorithms <b>Undergraduate Courses:</b> Programming I and II (OOP in C++), Advanced Programming Techniques, Data Structures and Algorithms, Control Systems, Finite Element Methods, Computer Aided Design, Fluid Dynamics, Materials, Thermodynamics	
CERTIFI- CATIONS	<ul style="list-style-type: none"><li>• CompTIA Security+ SY0-601 (January 2022)</li><li>• Machine Learning (Coursera, Stanford Online, May 2020)</li><li>• Reinforcement Learning Specialization (Coursera, University of Alberta, Feb 2020)</li></ul>	
SOFTWARE	<b>Languages</b> <ul style="list-style-type: none"><li>• Python, C++, Java, JavaScript (Node.js), Perl, Bash, MATLAB</li></ul> <b>Cloud Development Tools</b> <ul style="list-style-type: none"><li>• AWS, Docker, Kubernetes</li></ul> <b>Testing Tools and Frameworks</b> <ul style="list-style-type: none"><li>• Selenium, Cucumber, pytest, tox, JUnit, Mockito, GoogleTest</li></ul> <b>CI / CD</b> <ul style="list-style-type: none"><li>• GitLab, Jenkins, Microsoft TFS (now Azure DevOps Server)</li></ul> <b>Engineering Tools</b> <ul style="list-style-type: none"><li>• ANSYS, Creo, MakerBot 3D Printing, Minitab, LabVIEW, L<sup>A</sup>T<sub>E</sub>X</li></ul>	
EXPERIENCE	<b>Arcadia   Washington, D.C. (Remote)</b> <i>Software Engineer II - Data Utility Team</i> <ul style="list-style-type: none"><li>• Fix bugs related to utility data scrapers written in Python</li></ul> <b>The Stratagem Group   King of Prussia, PA</b> <i>Software Engineer Senior - Cloud Development Program</i>	April 2022 - Present  September 2021 - April 2022 <ul style="list-style-type: none"><li>• Designed and implemented a backend REST API query service using Spring Boot</li><li>• Determined query syntax and rules to allow the service to search reports stored in Elasticsearch</li><li>• Implemented unit tests using JUnit and Mockito</li><li>• Analyzed existing projects for reusability on new program tasks</li></ul>

*Software Engineer Senior - App Framework & Infrastructure Program*      Sept 2020 - Oct 2021

- Defined and implemented a program-wide DevSecOps pipeline that could build, test, scan, and package C++, Java, and Python applications through GitLab CI/CD
- Developed libraries in C++, Java, and Python to simplify API calls to a customer SDK
- Fixed library linking issues that occurred when compiling C++ code using Autotools
- Found and resolved bugs by deploying and testing applications in an OpenShift pipeline
- Served as scrum master for an agile development team of up to 15 engineers

*Software Engineer Senior - Automated Testing Program*      August 2019 - December 2020

- Created an AWS Lambda Python application to export / import TestRail project data
- Developed automated UI tests using Cucumber.js and Selenium to simulate user actions for over 40 different test scenarios
- Created Python, Java, and Node.js automated test pipeline templates in Jenkins
- Presented and demonstrated custom software tools at conferences to stakeholders

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

- Created and improved functions for reading and classifying incoming data from an Apache Kafka broker
- Evaluated datasets to determine useful attributes for accurate classification
- Hardened docker-compose development network to enhance functionality and stability
- Developed methods for hyperparameter optimization utilizing Optuna

*Co-op Program Recruitment Lead*      March 2020 - April 2022

- Lead the process of recruiting and hiring students from the Drexel University Co-op program for various roles throughout the company

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

*Software Engineer*      April 2018 - August 2019

*Associate Software Engineer*      September 2016 - April 2018

- Automated software installation and server configuration tasks
- Supported weekly deployments to a factory level test environment, helping to identify and resolve system defects
- Maintained software archives on an air-gapped system in Nexus by developing RESTful API modules
- Developed and improved End-to-end tests using Selenium and C#

## **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

**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

**Senior Design, 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

**Engineering Spring in Bochum, Ruhr-Universität | Bochum, DE**

*Lab Assistant*

April - June 2014

- Assisted a PhD candidate in performing research on Phase Change Slurries (PCS)