

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	Graduate Certificate in Computer Science, May 2023 (Expected) Temple University, Philadelphia, PA GPA: 4.00 B.S. in Mechanical Engineering, June 2016 Drexel University, Philadelphia, PA GPA: 3.86		
COURSE- WORK	Graduate Courses: Data Mining & Knowledge Discovery, Programming Techniques (Data Structures and Algorithms) Undergraduate Courses: Computer 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">• CompTIA Security+ SY0-601 (January 2022)• Machine Learning (Coursera, Stanford Online, May 2020)• Reinforcement Learning Specialization (Coursera, University of Alberta, Feb 2020)		
SOFTWARE	Languages <ul style="list-style-type: none">• Python, C++, Java, JavaScript (Node.js), Perl, Bash, MATLAB Cloud Development Tools <ul style="list-style-type: none">• AWS, Docker, k3s Testing Tools and Frameworks <ul style="list-style-type: none">• Selenium, Cucumber, pytest, tox, JUnit, Mockito, GoogleTest CI / CD <ul style="list-style-type: none">• GitLab, Jenkins, Microsoft TFS (now Azure DevOps Server) Engineering Tools <ul style="list-style-type: none">• ANSYS, Creo, MakerBot 3D Printing, Minitab, LabVIEW, L^AT_EX		
EXPERIENCE	The Stratagem Group King of Prussia, PA <i>Tech Lead - Cloud Development Program</i> September 2021 - Present <ul style="list-style-type: none">• Designed and implemented a backend REST API query service using Spring Boot• Determined query syntax and rules to allow the service to search reports stored in Elasticsearch• Implemented unit tests using JUnit and Mockito• Analyzed existing projects for reusability on new program tasks <i>Software Engineer Senior - App Framework & Infrastructure Program</i> 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 a Python application running on AWS Lambda to export 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 Jenkins pipeline templates for running automated tests
- Presented and demonstrated custom software tools at conferences to stakeholders

Software Engineer Senior - Machine Learning Program March 2020 - 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

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

September 2015 - June 2016

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