Andy Gnias

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

Graduate Certificate in Computer Science
Temple University, Philadelphia, PA
Expected Graduation: May 2023

B.S. in Mechanical Engineering, June 2016
Drexel University, Philadelphia, PA
GPA: 3.86

COURSEWORK

Graduate Courses: 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

CERTIFICATIONS

- 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, C++, Java, JavaScript (Node.js), Perl, Bash, MATLAB
- **Tools:** AWS, Docker, GitLab, Jenkins, Selenium
- **Engineering Tools:** ANSYS, Creo, MakerBot 3D printing, Minitab, LabVIEW, LaTeX

EXPERIENCE

The Stratagem Group | King of Prussia, PA

Tech Lead - Cloud Development Program September 2021 - Present

- Design and implement backend REST API services using Spring Boot in Java
- Implement unit tests using JUnit and Mockito
- Analyze existing projects for reusability on new program tasks

Software Engineer Senior - Application Framework & Infrastructure Program September 2020 - October 2021

- Defined and implemented program-wide DevSecOps pipeline that can build, test, scan, and package C++, Java, and Python applications through GitLab
- Developed libraries in C++, Java, and Python to simplify API calls
- Deployed and tested applications in an OpenShift pipeline
- Served as scrum master for an agile development team

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

- Created an AWS Lambda application to transfer TestRail project data 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

- Presented and demonstrated custom software tools at conferences to stakeholders

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

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

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