

**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, Fundamentals of Reinforcement Learning, Industrial In-  
ternet of Things

**Engineering Courses:** Control Systems, Finite Element Methods, Computer Aided De-  
sign, Fluid Dynamics, Materials, Thermodynamics

**SKILLS** **Programming Languages:** Python, Perl, Bash, C++, C, JavaScript, MATLAB  
**Operating Systems:** Linux (RHEL, Ubuntu), Windows  
**Software Tools:** Git, RPM, MSBuild, NuGet, Chocolatey, Nexus Repository Manager,  
Jenkins, TestRail, Docker, Selenium, Cucumber, Vim  
**Engineering Tools:** ANSYS, Creo, MakerBot 3D printing, Minitab, LabVIEW, L<sup>A</sup>T<sub>E</sub>X

**EXPERIENCE** **The Stratagem Group | King of Prussia, PA**  
*Software Engineer Senior* August 2019 - Present

- Export TestRail project data into an XML file and import into a remote TestRail instance utilizing REST API calls
- Research tools and develop prototypes for automated testing
- Present custom software tools at a conference to various product stakeholders

**Lockheed Martin, Space Systems Company | King of Prussia, PA**  
*Software Engineer* April 2018 - August 2019

- Automate processes to build NuGet and RPM packages
- Write scripts to install software, configure servers, and transfer files
- Communicate with test users to help identify and resolve product defects
- Write and improve code for a Java project to simulate test scenario events
- Maintain software archives in Nexus Repository Manager via RESTful API

*Associate Software Engineer* September 2016 - April 2018

- Install, configure, and test software as part of an agile development team
- Support weekly product deployments to a factory test level environment
- Develop and improve End-to-end tests using Selenium and C#
- Configure SSL/TLS certs for web services and applications

**Optical Diagnostics Lab, Drexel University | Philadelphia, PA**  
*Hess Undergraduate Research Scholar* June 2015 - March 2016

- Monitored vibration on lab equipment with an accelerometer utilizing I2C communi-  
cation
- Designed circuit board to read data from accelerometer and temperature monitor
- Wrote Python script to process and upload data to Google Drive using Google APIs
- 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

**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) program

**Essential Medical | Malvern, PA**  
*Product Development Co-op* September 2013 - March 2014

- Built and tested over 500 vascular closure devices for sealing capability and functionality
- Wrote critical documents, 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

- **SpotifyAPI Playlist Generator** - Generates a Spotify playlist for a Spotify user from a text-based list of songs
  - <https://github.com/AGnias47/SpotifyAPI>
- **Secret Santa Selection Manager** - Makes Secret Santa selections for a group, considering exceptions, and emails the assignments to participants
  - [https://github.com/AGnias47/Secret\\_Santa](https://github.com/AGnias47/Secret_Santa)

## 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)