

# Henry Warren

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**EDUCATION** BS Computer Science & Engineering (expected Dec 2018)  
Southern Methodist University  
Bobby B. Lyle School of Engineering

Major GPA: 3.72

## WORK EXPERIENCE

***PepsiCo / Frito-Lay, Software Engineering Intern - Plano, TX***  
(Within PepsiCo's Cyber Security Operations Center)  
May 2018 - August 2018

- Assisted in design and migration of stream-processing infrastructure from a Splunk solution to a cloud-based Kafka architecture, saving PepsiCo roughly \$1 million a month (Kafka, Spark).
- Designed, built, and maintained a threat-emulation application to harness the ATT&CK framework for the purpose of validating Splunk detection queries (Python, Django, Azure).
- Contributed 15+ threat detection queries with corresponding validation tests (Splunk, Python).

***Silvercar (Audi), Software Engineering Intern - Austin, TX***  
May 2017-August 2017

- Implemented HMAC authentication feature in rental car firmware (C language).
- Wrote/fixed 300+ unit tests for company's backend API. Got test coverage to 90%+ (Ruby, Rails).
- Rewrote firmware provisioning script and created extensive process documentation (Python).

***Globaleyes, Software Engineering Intern - Dallas, TX***  
(Defense-focused export compliance company)  
September 2016-May 2017

- Built a robust email bot for sending internal newsletters (Python, Flask, AWS).
- Created a web scraper to crawl government websites and detect changes in international compliance law. Linked to email bot for alerting employees upon detection of changes (Python).

## PROJECTS

### ***PuzzleCrypt File Fragmentation***

- Data security application that utilizes fragmentation and dispersion of files to secure them (Java).
- GitHub repository: <https://github.com/henrysdev/PuzzleCryptFull>
- Write-up: <http://henrysprojects.net/projects/file-frag-proto.html>

### ***Scrape n' Spray Email Hacking***

- Built a web crawler that harvests Microsoft outlook email addresses and then password sprays them with a list of common passwords. Proof of concept demonstration included (Python).
- Write-up: <http://henrysprojects.net/projects/email-spraying.html>

### ***Convolutional Neural Network Simulation***

- Step-by-step technical explanation of a convolutional neural network aided by 3D simulations created in Unity3D.
- Write-up: <http://henrysprojects.net/projects/conv-net.html>

## AWARDS

### ***SMU Startup Pitch Competition Winner - Spring 2018***

- Technical lead for student-lead startup company that won \$10k in funding.
- Author of the proof-of-concept application as well as two follow up prototypes.

### ***SMU Competitive Programming Competition Finalist - Fall 2015***

- Placed 3rd in a runtime-based sorting algorithm competition held within the engineering school.
- Entered with a multi-threaded implementation of merge sort (C++).

**SKILLS** Python, (C)++, Elixir, Linux, AWS, Java, Unity, Flask, Django, NodeJS, Git, Splunk, VirtualBox, Jira