

Ty Trusty

817-690-2712 | tytrusty@utexas.edu | <https://github.com/tytrusty>

EDUCATION

The University of Texas at Austin, Austin, TX
Bachelor of Science in Computer Science

Expected Graduation: May 2019

- **GPA: 3.95**
- *Relevant Coursework: Algorithms, Object-Oriented Programming, Computer Graphics, Physical Simulation*
- *Honors: University Honors (Fall 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017)*

EXPERIENCE

Lockheed Martin, Denver, CO

Summer 2017

Intern, Rotary and Mission Systems

- Worked on backend software for an Internal Research and Development project
- Ported large-scale Windows software project to function on a Linux system.
- Developed software to execute code metrics that includes a GUI using C++ QT.

LANGUAGES and TECHNOLOGIES

- Proficient in C++, C, Java, Python; Familiar with JavaScript, SQL, HTML, CSS.
- Git, Maven, Linux, Microsoft SQL Server, XML, Travis-CI, Eclipse, Visual Studio, OpenGL

PERSONAL PROJECTS

- **Satellite Tracker App (Android) –**
 - Real-time tracking for all of NORAD tracked objects (~20,000 objects)
 - Visualizes satellites in 2D-space with Google Maps API and in 3D using an android globe library
 - Accumulated 100,000+ downloads, and ~4.3/5 store rating
- **AR Satellite (Android) –**
 - Used Google's ARCore to visualize satellites orbiting earth in augmented reality
 - OpenGL ES used to render the Earth and accurately animate satellites
- **Computer Graphics Fluid Simulation (C++) –**
 - Created project to simulate 2D object melting by representing solids as highly viscous liquids
 - Rendered with OpenGL and simulated fluid motion using the Eulerian flow representation
- **XSS Shell (Python) –**
 - Command line program to test a website for Cross-site Scripting vulnerabilities
 - Designed a multi-threaded web crawler to discover all links and forms associated with a website
 - Analyzes HTML responses for reflected input and attempts to craft a URL to inject a script.
- **Dota 2 Counter Picker APP (Android) –**
 - Created app that allows the user to select Dota 2 game characters and the program determines the best characters against opponents' selected characters
 - Built algorithms to reduce and process raw data (~12,000 to 111 entries) to present to user

ACTIVITIES

Mobile App Development, Austin, Texas

September/2015 – Present

Active Member

- Participation in Android application development workshops.