

Lucas Switzer ->

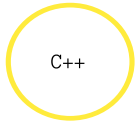
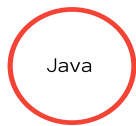
Cornell 2020 | College of Engineering | Computer Science
Electrical Engineering | Game Design

About

I am a college freshman who has a passion for computer science and software development. Some of my fields of interest are robotics, cybersecurity, Internet of Things, and game design. I am currently looking for Summer 2017 internship opportunities.

Skills

Experienced



Proficient



Familiar



Tools

- Arduino
- Android
- Awesomium Engine
- AWS
- boost

- Git
- IntelliJ
- NI Labview
- OpenCV
- Visual Studio

> Education

Cornell University ----- -2016 - Present
Classes: *Intro to Python (Placed out), Data Structures, Discrete Structures*
- Software Engineer on Cornell Cup Robotics (Vision System Team)
- GPA: 3.0
Penn State University ----- 2014 - 2016
Classes: *Intro to C++, Discrete Mathematics*
- GPA: 4.0
Clarion University ----- 2013 - 2016
Classes: *Intro to Micro-computing*
- GPA: 3.8

> Experience

RealBotics, Inc. ----- January 2016 - Present
Skills used : *C++, Design, Web Stack*
- Developed native client front-end and back-end
- Rendered HTML/CSS pages using the Awesomium Engine to provide cross-platform support
- Integrated low-level IO to interface with peripheral devices
- Interfaced with external servers to provide web functionality
CyberPatriot ----- 2013 - 2016
Skills used : *C++, Linux, Security*
- Founded local program and elected as team captain
- Learned to secure and configure infected / unsecure Windows and Linux machines
- Developed tools to automate repetitive security tasks
- Constructed virtual networks as part of Cisco's Networking Challenge
FIRST Robotics ----- 2013 - 2016
Skills used : *C++, Java, Linux*
- Programming lead and Drive Captain in 2016
- Developed closed loop controls using sensors and PID algorithms
- Implemented Robot Vision using NVIDIA TK1 hardware and OpenCV
- Represented at the World Championships
- Partnered with Carnegie Mellon Robomatter, Inc. to develop online robotics curricula.
Diversity & Inclusion Advocate ----- 2012 - Present
Skills used : *Public Speaking*
- Workshop presenter with NGLCC and Out & Equal Workplace Advocates
- Founder of school's GSA
- Featured in *Families Like Yours* Documentary

Recent Projects

Dorm of Things

Created Dorm of Things, an Android-based home automation platform that uses the power of Arduino, to provide makers with the tools to construct their own Internet-of-Things type network using devices they already own and tools with which they are familiar.

RealBotics

Contracted by RealBotics, Inc. to develop a client program for the RealBotics platform. The platform itself is a multi-branch operation that integrates web, native, and micro-controller/micro-computing devices to create a forum for people to share and interact with various technological creations from anywhere in the world.

Hect0r

Build and programmed an autonomous micro-droid with a high-powered 1 watt laser turret. The software included an auto-aim vision program, autonomous routines, and an emotions engine that allowed the droid to respond to human interaction.

SHARP Scripser

Developed SHARP Scripser, a program for rapid development and testing of various autonomous tasks performed by robots in the FIRST Robotics Competition. The GUI provides a simple "drag and drop" interface where users can draw out autonomous routines using pre-loaded pictorial representations of provided code modules.