CYPRESS M. FRANKENFELD

785 222 4348
cypress@students.olin.edu
cypressf.com

Education

Franklin W Olin College of Engineering, Needham MA, May 2014, GPA: 3.82

- Candidate for BS in Engineering with a Concentration in Computing
- Coursework: Circuitry and Controls, Microcontrollers, Computational Probability and Statistics, Linear Algebra, Modeling and Simulation in MATLAB, Differential Equations, Vector Calculus, Software Systems*, Human Factors in Interface Design*, Discrete Math* (*currently enrolled)

University of Pennsylvania, Philadelphia MA, Summer 2009, GPA: 4.0

- Recipient of full $5,650 merit scholarship for the Summer Academy in Applied Science and Technology for computer science.
- Coursework: Intro to computer science with Java

University of Kansas, Lawrence KS, 2009-2010, GPA: 4.0

- Relevant Coursework: Honors Calculus II

Free State High School, Lawrence KS, May 2010, GPA: 4.0 (unweighted), 4.1 (weighted)

- Valedictorian, Relevant Coursework: Independent Studies in Linear Algebra and Web Development

Experience

NeuroScouting Intern **Summer 2012**

- Designed and built three websites (front and back end) to display data for the company. Rewrote old data analysis code.

NASA Intern **Summer 2011**

- In a team, helped build a digital X-ray transmission system and a thermoelectric cooler controller for a pico-satellite.

University of Kansas Particle Physics Intern **Summer 2010**

- Interned at the University of Kansas to compare magnetic monopole simulations in Java and C.

Projects

Autonomous Glider **Sep-Dec 2011**

- Worked on a closed-loop control algorithm written in C on a PIC microcontroller using the input from an accelerometer to stabilize a glider.

Weather Balloon Payload **Jan-May 2011**

- Worked to attach a payload with cameras, thermometers, and barometers to a weather balloon, which successfully ascended over 80,000 feet before bursting, safely parachuting the equipment to the ground.

X-Ray Digital Signal Transmission **Summer 2011**

- Worked on a device that transmitted digital signals via RS232 at 4800 Baud through an x-ray transceiver. Wrote a chat client in Bash that enabled two computers to talk to one another through this system.

Thermoelectric Cooler Controller **Summer 2011**

- Helped designed a PID control algorithm to cool an image sensor on a small satellite. Successfully decreased power dissipation from 13 W to 9 W for a goal temperature of -30 C.

Bioinspired Radio-Controlled Armadillo Toy **Summer 2011**

- Designed and built a prototype armadillo toy. It was radio-controlled and driven by two servos.

Skills

Programming: JavaScript/HTML/CSS, Python, SQL, MATLAB, Arduino. Some experience with Java.