JACOB KINGERY

jacob.kingery@students.olin.edu
1000 Olin Way MB146 ● Needham, MA 02492
jacobkingery.github.io

EDUCATION

Olin College of Engineering - Needham, MA   May 2016

Candidate for Bachelor of Science in Electrical and Computer Engineering

Recipient of 4-year, 50% tuition Olin Merit Scholarship

Current GPA: 3.80

Courses include: SCOPE (senior engineering capstone)*, Computational Robotics*, Systems*, Controls, Game Programming, Software Design, EE Prototyping, Computer Architecture, Analog and Digital Communications, Signals and Systems, Discrete Mathematics, Principles of Engineering, User-Oriented Collaborative Design
currently enrolled

Greene County High School - Jefferson, IA   May 2012

GPA: 4.0, Valedictorian, National Merit Finalist, AP Scholar with Honor

EXPERIENCE

athenahealth   Summer 2015
Software Development Intern   *Watertown, MA*

- Ported an internal tool for looking up page information to a new tech stack, made improvements to the usability of the tool, and updated the page-indexing script
- Developed across the full stack using Perl, SQL, JavaScript, CSS/LESS, and Handebars-based templating

Music Variation Research   Fall 2014 - present
Research Assistant   *Olin College*

- Working with Professor Diana Dabby on her musical variation research
- Built a web app using Node.js, Jade, CSS, and jQuery/Javascript that allows people to listen to musical variations created with chaotic algorithms
- Currently exploring a variety of variation algorithms and implementing them in Python

Course Projects

- *EE Prototyping*: In a group of two, designed a circuit for an Etch A Sketch with three-bit color output over VGA using discrete logic chips for the timing, laid out the circuit as a four-layer PCB, and populated the board with over one hundred components
- *Principles of Engineering*: In a group of four, designed and built a modular, mechatronic self-playing glass harp that accepts users' compositions through a web app and plays them on eight wine glasses; check it out at ghostfiddle.weebly.com
- *User-Oriented Collaborative Design*: In a group of five, worked with bicycle commuters to design a product (up to the proposal stage) that would increase safety and bicycle awareness on the road
- *Software Design*: In a group of four, wrote a program suite that used various methods to convert images and video into arrays of ASCII characters

LEADERSHIP AND ACTIVITIES

Music

- Co-navigator of the Olin Conductorless Orchestra (Fall 2013 - Spring 2015)
- Co-leader of the Cheerios (Olin's non-auditioned a cappella group) (Spring 2014 - Fall 2015)

Extracurricular

- Puzzles Club
    Participated in the Microsoft College Puzzle Challenge on a team of four in 2013, 2014, and 2015

SKILLS

Python, Perl, Node.js, HTML, CSS, LESS, JavaScript, jQuery, Arduino C, SQL, git
MATLAB, LTSpice, DipTrace, ModelSim, Verilog, LaTeX