151 Orchard Hill Dr, Rm 414 Amherst, MA 01003 774-275-4570 kvedder@umass.edu 15 Pheasant Hill Dr Shrewsbury, MA 01545

#### Skills

- Proficient in Java (Eclipse/Netbeans) and C/C++ (Visual Studio/Emacs)
- Experience with git, Python, SQL, Javascript, HTML, CSS, Bash, FORTH
- Develop on Windows and Debian Linux
- Agile and Waterfall development methodologies
- Web Service development, Robotic systems programming and development, Microcontroller programming, Socket programming, some Real-Time system development

## **Employment History**

# Unidesk Corporation – C++ Developer (Summer 2015)

Worked with a team of engineers to successfully design and implement a framework to test proprietary offline Windows registry hive manipulation APIs. Wrote C++ framework to call Win32 APIs to provide setup and validation of registry hives manipulated by Unidesk's registry hive editor.

# Unidesk Corporation – Robotics Internship (Summer 2014)

Worked with the CTO and CMO to successfully implement an articulated robot arm for a trade show to be manipulated by attendees through an iPad. Wrote Java backend to implement a JSON based web service to accept high-level user input, translating the commands into lower-level FORTH commands to choreograph robot movements while avoiding collisions.

### Education

## University of Massachusetts Amherst (2015 – Present)

BS in Computer Science, Expected Graduation: May 2019

Shrewsbury High School (2011 - 2015)

Graduated: May 2015. GPA: 3.55/4.00, SAT: 2120

### **Activities**

# FIRST Robotics FRC Team 467 (2012 - 2015)

- Lead Programmer (2013 2015): Led a team of several students to program a robot to meet each year's challenge within a six week development period. Coordinated architecture and design with the Electrical Team to wire the robot and define robot sensors.
- Steering Committee Member (2014 2015): Worked with a team of five students to run twice-weekly meetings, oversee sub-team coordination, and manage build schedule.

## FIRST Robotics FLL Mentor (2013 - 2015)

 Mentored teams of eight to ten middle school students building Lego robots, completing research projects, and competing at FIRST FLL competitions.

## Counselor for Summer Technology Camp (2012 - 2014)

 Mentored groups of elementary and middle school students building Lego robots and constructing model rockets and trebuchets.

### National Honor Society (2014 - 2015)

• Communications Committee Chair (2014 - 2015): Led a team of twelve students to produce a television spot advertising the talent show held by the National Honor Society.

#### **Awards**

### Most Technically Challenging Project Award at Blueprint HackMIT Hackathon (2014)

• Developed a working application in eight hours with a team of three other high school students that provides free internet access via SMS text messages. Implemented an HTTP service backend in Java.