**Xiaoyue Zhang . blacksheepmails@gmail.com . 307-220-1883**

**Work Experience**

**Astral Dynamics Software Developer** *July 2015* – *current*

Made a web app that collects data for a psychology study and worked on a complex data analysis tool. Used technologies including R, Elm, Redis, React, Angular, Grunt, Flask, and Sass.

**American Conservation Experience** *April 2015 - Sept 2014*

Americorps Member Worked on projects that require back country camping and wilderness survival. Work included invasive species control, trail building and maintenance, rock work, and revegetation. Became chainsaw certified and accumulated 200+ hours of chainsaw experience.

**MIT D-Lab Lab Assistant**  *Jan 2015*

Created lab kits for a class that teaches teams of students from various backgrounds how to design and deploy kits for making medical equipment. Worked with many sensors, Arduino products, and Ardunio extensions.

**Massachusetts Institute of Technology Teaching Assistant** *Fall-Spring 2013*

Assisted the professor in teaching and managing Mathematics for Computer Science (6.042j). Oversaw graders and lab assistants, was in charge of keeping track of student performance and assigning grades for the entire class, and composed online courseware for the edX platform.

**Vecna Technologies Software Intern** *Summer 2013*

Created a web applet for visualizing and searching patient medical records in an intuitive and convenient manner. This involved both client side and server side work.

**MIT Lincoln Laboratory Undergraduate Researcher** *Summer 2012*

Designed and created circuitry for an autonomous underwater vehicle that will act as a charging station for larger submarines. Worked heavily on sensors and power electronics.

**Women’s Technology Program Residential Tutor**  *Summer 2011*

Tutored talented high school girls in Electrical Engineering and Computer Science, designed assignments and labs, lived in residence halls to guide students’ study habits and help create a safe and friendly atmosphere.

**MIT Lab of Manufacturing and Productivity Student Researcher** *Summer 2010*

Researched artificial intelligence with a focus on natural language processing and natural language processor design. Developed MySQL databases and automated data collection tools for large language dictionaries. Built front-end using PHP/MySQL and JavaScript allowing for accurate and fast searching.

**Awards**

**Mobile Autonomous Systems Laboratory (MASLab) 2nd Place** *Winter 2012*

MASLab is a month long competition where teams build robots that must navigate a course and play a game with an opposing team completely autonomously, using computer vision and data from sensors.

**Education**

**Bachelor of Science, Massachusetts Institute of Technology** *June 2014*

Primary Major: Electrical Engineering and Computer Science | Advisor: Prof. Albert Meyer

Secondary Major: Mathematics

Concentration: Music

**Skills**

**Languages:** (fluent) English, (intermediate) Spanish, Mandarin Chinese

**Computer (Proficient):** Python, Java, Arduino, Matlab, C, Javascript, Elm

**Computer (Experience in):** PHP, Scheme, MySQL, Haskell, C++, Linux, HTML, CSS, Sass, React, Angular, jQuery, LATEX, Processing, Assembly, Photoshop, GIMP, MaxMSP

**Machining:** Machine shop, power tools, laser cutter, water jet, precision machining, CNC, CAD

**Outdoors:** Wilderness First Aid, CPR, Chainsaw, Haul Systems (climbing/rescue), Winter Survival, Bicycle repairs

**Interests and Activities**

Technology, STEM Education

Bicycle Touring, Mountaineering, Climbing, Traveling

Drawing, Murals, Violin