julia.ma@gmail.com Portfolio: juliama.com +1 (443)838-3438

Education

Massachusetts Institute of Technology (MIT)

Master of Science in Media Arts and Sciences

Cambridge, MA June 2012

Highlighted Coursework: Pattern Recognition and Analysis; Tangible Interfaces; Eccescopy: Eye and Ear-Centered Shared Augmented Reality; Networks, Complexity and their Applications; Fractals and Chaos

California Institute of Technology

Pasadena, CA

Bachelor of Science in Electrical Engineering

June 2006

Highlighted Coursework: Analog Circuit Design; Electromagnetic Engineering; Digital Signal Processing; Communication Systems Fundamentals; Signals, Systems, and Transforms

Experience

Orange Labs, Paris, France

Aug 2012 - Present

- Windows phone team intern:
 - o developing tools that automatically check UI design constraints for Orange apps on Windows Phone 7

Viral Spaces, MIT Media Lab, Cambridge, MA

Aug 2010 – June 2012

- Research Assistant:
 - o mapped links and similar interests between companies of different sectors into meaningful visualizations
 - o developed an AR application that shared images from specific events to future visitors of that location
 - o created a massively-multiplayer online game for users to interact in both the virtual and physical worlds
 - o engineered real-time visualizations of a building's energy usage to influence people's behaviors
 - implemented an auto-categorization of research project themes in the Media Lab database

5th Combat Communications Group, United States Air Force, Robins AFB, GA Aug 2006 – Aug 2010

- Flight Commander: ensured deployment readiness for 700+ personnel; deployed people to support state-side and overseas missions in 20+ locations; planned and coordinated all logistics for group-level exercises
- Site Engineer: developed contingency plans for base closures overseas
- Deployed Commander: managed a team of 16 people to provide communication infrastructure to a US/Pakistan joint fighter training exercise
- Communications Engineer: planned and coordinated all engineering and logistics for squadron-level exercises; managed squadron budget of \$200k/year

Multi-Res Modeling Group, Caltech Computer Science, Pasadena, CA

June 2003 - Sept 2003

Research Fellow: programmed blended algorithms for subdividing meshes to model 3D surfaces

Skills

Software: Python, Java, C#, C, Matlab, Assembly, HTML5, Javascript, Processing

Hardware: microcontroller programming, circuit design

Languages: English – fluent, Chinese – conversational, French - basic

Other: machining, glassblowing, blacksmithing

Conferences and Awards

MIT Energy Conference Showcase (2011); 5 Combat Communications Support Squadron Company Grade Officer of the Quarter (2010); Caltech Summer Undergraduate Research Fellowship (2003)

Activities

Haystack Mountain School of Crafts, glassblowing session; MIT Media Lab IOIO Hackathon; Boston Music Hack Day; MIT Media Lab Student Committee; MIT Curling Club; MIT Glassblowing Lab; MIT Blacksmithing Lab; Cambridge Symphony Orchestra; Puzzle challenges; Aerial acrobatics; Distance running