

**Julia Shuhong Ma**

Portfolio: [julia.ma](http://julia.ma)

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## 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 (Caltech)**

Bachelor of Science in Electrical Engineering

Pasadena, CA

June 2006

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

## Work experience

### **Google Inc, San Francisco, CA**

June 2016 - Present

- *Senior site reliability engineer / software engineer*, Traffic Sessions SRE
  - Oncall for the Google Front End, which handles all ingress internet traffic to Google services
- *Senior software engineer*, Google Surveys - Built a platform for market research and training ML models
  - Team lead for the oncall team in responding to alerts and maintaining production systems
  - Served as a liaison for internal client teams and implementing features for their use cases
  - Developed backend infra that includes a targeting system, response processing, and client-facing API
  - Worked in C++/Python/Go/Java/Javascript across the full-stack

### **Google Inc, Mountain View, CA**

Feb 2013 - June 2016

- *Software engineer*, Google Shopping - Created novel and useful shopping experiences
  - Designed, conducted, and analyzed A/B experiments to test and launch new user interfaces on Google.com
  - Lead engineer for developing of immersive experiences on mobile search results for narrow product queries
  - Provided mentorship for interns and new engineers on the team resulting in multiple successful launches

### **Orange Labs, Paris, France**

Aug 2012 - Dec 2012

- *Software engineering intern, Windows Phone team*: 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*:
  - mapped links and similar interests between companies of different sectors into meaningful visualizations
  - developed an AR application that shared images from specific events to future visitors of that location
  - created a massively-multiplayer online game for users to interact in both the virtual and physical worlds
  - 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, US 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

## Activities

Corning Glass Studio (2026); Pilchuck Glass School (2024, 2018); Haystack Mountain School of Crafts, glassblowing session (2022, 2016, 2012); Women-Teach-Women to Code (2014-2017); Half marathon distance running