

# FERNANDO TRUJANO

trujano.fernando@gmail.com · fernandotrujano.com

## EDUCATION

---

- Massachusetts Institute of Technology** Cambridge, MA · February 2018  
Master of Engineering - Systems Concentration with research focused on AR/VR (see publications section).
- Massachusetts Institute of Technology** Cambridge, MA · June 2017  
Bachelor of Science in Computer Science and Electrical Engineering  
Related Coursework: Computer and Network Security · Computer Systems Security · Artificial Intelligence  
Intelligent Multimodal User Interfaces · Systems Engineering · Software Studio  
Software Construction · Algorithms I · Algorithms II · UI Design

## WORK EXPERIENCE

---

- Google** · *Software Engineer* Cambridge, MA · February 2018 - Present
- Synack** · *Software Engineering Intern* Redwood City, CA · Summer 2016
- Selected to be a KPCB engineering fellow (~3% acceptance rate) at Synack
  - Developed tools for automatic detection of common web security vulnerabilities for the Hydra Intelligence Platform
- Disney Interactive** · *Software Engineering Intern* Glendale, CA · Winter 2016
- Worked with the mobile team to develop a second screen interactive experience for Disneyland's 60th anniversary special
  - Implemented *Made with Magic* technology using C++ to deliver an interactive experience that syncs directly to the show
- LinkedIn** · *Web Developer Intern* Mountain View, CA · Summer 2015
- Developed elegant and efficient code on a large codebase for 380M+ users
  - Worked on a new front facing product as part of the growth team using Play/Java, Javascript and HTML/CSS
- Slide** · *Software Engineering Intern* New York, NY · Winter 2015
- Focused on developing the web application core with React.js, Reflux and GSAP
  - Implemented an advanced card parser and account pages with smooth transition animations for optimal user experience

## PROJECTS

---

- ARPIANO** · *Unity, C, Windows Mixed Reality* Cambridge, MA · 2017 - Present
- Designed and developed a framework for extending a physical piano using augmented reality
  - Implemented various components to support visual music learning, music visualizations and music understanding
  - Published and Presented at ICITL 2018 and awarded "Best paper award"
- Asterisks** · *Node.js, Express.js, MongoDB, PHP, HTML/CSS/jQuery* Mountain View, CA · 2015 - 2017
- Developed a chrome extension that allowed friends to easily and securely share internet accounts without sharing credentials
  - Built the backend in node.js and frontend of extension in HTML/JS/CSS. Created internal tools for logging and debugging
  - Won 1st place at LinkedIn's bay area intern hackathon
- Pebble Custom Workout Timer** · *C, Javascript, PHP, Node.js, HTML/CSS/jQuery* Houston, TX · 2014 - 2018
- Created Pebble-guided custom workout app with input from phone or computer. Used by over 10000 users in 140+ countries
- Underwater Robotics** · *Arduino, C* Houston, TX · 2012 - 2013
- Designed, built, programmed, and troubleshooted an underwater ROV for MATE ROV. Team of three.
  - Robot featured a metal detector, 3D compass, manipulator, measuring device and a visual control station

## SKILLS

---

**Technical:** Java, Python, Node.js, HTML, CSS, Javascript/jQuery, ExtendScript, Arduino,  $\LaTeX$   
**Programs:** After Effects, Photoshop, Final Cut Pro X  
**Non-technical:** Fluent in English and Spanish, Instruments: French Horn and Mellophone

## PUBLICATIONS

---

- Trujano F.**, Khan M., Maes P. (2018) ARPIANO Efficient Music Learning Using Augmented Reality. In: Innovative Technologies and Learning. ICITL 2018. Lecture Notes in Computer Science, vol 11003. Springer, Cham
- Khan M., **Trujano F.**, Maes P. (2018) Mathland: Constructionist Mathematical Learning in the Real World Using Immersive Mixed Reality. In: Immersive Learning Research Network. iLRN 2018. Communications in Computer and Information Science, vol 840. Springer, Cham
- Khan M., **Trujano F.**, Chaudhury A., Maes P. (2018) Mathland: Playful Mathematical Learning in Mixed Reality In: Extended Abstracts of Conference on Human Factors in Computing. CHI 2018. Association for Computing Machinery, ACM Digital Library, 3186499