Fernando Trujano

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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 vulnerablities 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 aniversary 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*   Mountain View, CA · 2018
· Designed and developed a framework for extending a physical piano using augmented reality
· Implemented various compontents 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