

Jacob Haip

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Education

Massachusetts Institute of Technology – Cambridge, MA – 2011 - 2015

- B.S. in Electrical Engineering & Computer Science – GPA 4.6/5.0
- Pi Lambda Phi, TechX

Relevant Coursework: Product Design (2.009), Computational Fabrication, Algorithms, Machine Learning, Software Construction, Circuits, Digital Electronics, Engineering Innovation & Design, Gordon Engineering Leadership Program, Science Writing

Experience

Formlabs – Software Engineer – Somerville, MA – 2014 - Present

- Technical lead & main developer of formlabs.com/dashboard the online dashboard for the Form 2 3D Printer. Scaled the project from zero to a large portion of Form 2 owners.
- Live updating customer frontend (React) and backend REST API (Django, Kubernetes)
- Many redesigns & product iterations informed by user tests & data analysis
- Misc projects: Desktop software UI/UX in Qt C++, Form Cell machine control UI
- Screening & interviewing candidates, Mentoring interns, onboarding new employees
- Data evangelism - Growing a Data Warehouse, advising departments on data integrations, setup and training for data analysis, GDPR compliance

Tumblr – Engineering Intern – New York, NY – Summer 2013

- Frontend web development in JavaScript to improve the user facing elements of Tumblr

Storytelling Machines – Engineering Intern – Cambridge, MA – Summer 2012

- Frontend web development for a novel online movie creation system, focusing on cross browser and legacy support for animations and effects in JavaScript, HTML5 and CSS

Research & Competitions

CSAIL Computational Fabrication Group – MIT – Fall 2014 - Spring 2015

- Designing of parametric joints for use in 3D-Printed Foldable Robots and integrating them into a robot design software. Working in OpenSCAD and C++

MASLAB Autonomous Robotics Competition – MIT – January 2014

- Project lead and Mechanical design on a 5 person team that built and programmed an autonomous robot for the competition – 3rd Overall + Award for use of ROS
- Solidworks CAD assembly made and used to laser cut and machine aluminum and acrylic

Mediated Matter – MIT Media Lab – Cambridge, MA – Fall 2012

- Developed a Python application to adjust and visualize parameters affecting the conversion of 3D models into a 3D printing format (a 3D Slicer generating GCODE)

Notable Projects

Programmable spaces – Boston, MA – 2017 - Present

- Independent research into programmable spaces, tools for seeing, and a blurred line between the physical and the digital

The Printer Discourse – MIT – Spring 2014

- Art Installation that printed out community responses to questions in continuous streams
- 8 Independent Wifi-connected Raspberry Pi's + Thermal Printers + Twilio

Multi Touch Desks – Fredericktown, OH – 2011-2012

- Building and writing software for desk-sized multi touch screens

Skills & Activities

Knowledgeable in: Python, Django, JavaScript, React, Docker, Kubernetes, AWS, Jenkins, SQL, Data Science, HTML, CSS, Git, User testing, Microcontrollers, Web Design

Experience with: C/C++, Go, OpenCV, 3d Modeling, Wood & Metal Machining