

JEREMY JOACHIM

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EDUCATION



Brown University

B.S. in **Mechanical Engineering** *Class of 2017*, GPA 3.6

Courses: Dynamics and Vibrations, Circuits and Signals, Space Systems Design, Solid Mechanics I + II, Design Studio Mechanical Technology, Fluid Dynamics, 3D Foundation, Robotic Systems Design, Senior Capstone Design

Rhode Island School of Design (RISD)

Cross-registered through Brown, *2015–present*

Courses: Metal I, Inclusive Design, Data Object, Color

EXPERIENCE



HP Inc.

Mechanical Engineering Intern, Summer 2016 (Boise, ID)

Developed countermeasures to dust-related motor issues to improve communication, metric collection, and serviceability. Designed and tested an attachment that allows 8 x 8 media to be printed on even though the paper trays were built to lock, accepting a media size no larger than 8.15 x 8.15. Investigated the **UX** and discoverability of new slide-out keyboards on printers, **prototyping** and testing solutions iteratively with the **User Experience Design** and **Industrial Design** teams.

Greenlight VR

Research Analyst, June 2015–June 2016 (San Francisco, CA)

Collaborated in designing a Chrome extension that allows users to easily access data on **virtual reality** companies. Wrote, released, and distributed white papers and weekly articles on the importance of business intelligence in VR and personal insights identified in the industry.

Brown Human to Robots Laboratory

Robotics Researcher, May 2014–September 2015 (Providence, RI)

Developed a robust **motion capture** system comprising a combination of 2 Microsoft Kinects and 6 Optitrack Motives. Adapted the collected motion capture data to lead a project analyzing the motion and gestures of children ages 18–24 months, which involved constructing one of the **world's first** URDFs (Universal Robot Description Format) made to model a human child, as well as orchestrating live data collection.

PROJECTS



Brown Engineering Curriculum

Coursework, September 2013–present

Built a screwdriver fabricated entirely from **machine techniques** (lathing, milling, quenching). Designed and built, using MATLAB optimization, a system to isolate a sensitive instrument from ground-borne vibrations in collaboration with 2 other students. Used **heat transfer analysis** to determine the optimal packing density and material for a cost-efficient sleeping bag. Led a team of 6 in creating and demonstrating a spin-stabilized **satellite deployment** system for a proposed 8 year mission to Saturn's rings. Other projects at jeremyjoachim.com

LEADERSHIP



Brown STEAM

Co-President / Design Lead, January 2016–present

Organize and plan Brown and RISD events, projects, and lectures that focus on the intersections between the STEM fields and art and design. Planned STEAM's **Assistive Tech Makeathon**, a 40-person, 40-hour hackathon-inspired event that began with exercises for participants to empathize with people with disabilities before forming teams and designing informed assistive solutions. Also led a team of my own, winning **first place**. More details at: jeremyjoachim.com/makeathon

Brown/RISD/MIT STEAM City + Data

Workshop Series Coordinator, January 2017

Organized and ran STEAM's (STEM+Art) 5-week workshop and lecture series on interdisciplinary approaches to data and the city. The workshop was made up of 16 selected students from varied disciplines at the above schools and culminated in a gallery opening presenting each team's project. More details at: steamwith.us/citydata

The Alef Beats

President, Music Director, September 2013–present

Run the Alef Beats, a joint a cappella group of Brown and RISD. Arrange and teach **music**, run rehearsals, conduct songs, and organize funds for paid shows.

SKILLS CAD, Design for Manufacturing, Finite Element Analysis, Arduino, Processing, Python, MATLAB Illustrator, InDesign, After Effects, Sketch, InVision, HTML, CSS, Maya, Max MSP