

# Emily Hu

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## Education

<b>Massachusetts Institute of Technology (MIT)</b> , Cambridge, MA	Graduation: June 2020
<ul style="list-style-type: none"><li>• Candidate for B. S. in Computer Science and Engineering</li><li>• Relevant Coursework: Software Studio (6.170), Software Construction (6.031), Computer System Engineering (6.033), Computer Graphics (6.837), Algorithms (6.006, 6.046), Fundamentals of Programming (6.009)</li></ul>	
<b>Texas Academy of Math and Science (TAMS)</b>	June 2016
<ul style="list-style-type: none"><li>• GPA 4.0/4.0, PSAT 240; SAT 2370; SAT Subject: Math Level II 800, Physics 800</li></ul>	

## Skills

**Languages:** Proficient in Python and Java. Experience with Javascript, HTML/CSS, SQL, C/C++, C#.

**Frameworks:** Experience with Vue, React, Ruby on Rails, JQuery

## Work Experience and Projects

<b>Software Intern at Cruise, Mapping Team</b>	06/2019-08/2019
<ul style="list-style-type: none"><li>• Prioritized and addressed feature additions and bug fixes in the mapping service</li><li>• Streamlined the pipeline for producing map changes</li></ul>	
<b>Engineering Practicum Intern at Google, Google Brain Team</b>	06/2018-08/2018
<ul style="list-style-type: none"><li>• Designed and implemented a distributed pipeline (Apache Beam Python) to statistically analyze the quality of a large amount of labeled data for machine learning models</li><li>• Created metrics that evaluate the quality and consistency of data from multiple sources</li><li>• Created a visualization tool to inspect label quality metrics and to determine sources of poor quality</li><li>• Automated pipeline to pull daily from fresh data where before manual updates were necessary</li></ul>	
<b>Software Intern at Twitch, Events Team</b>	01/2018
<ul style="list-style-type: none"><li>• Updated and improved the events-scheduling interface for streamers</li><li>• Incorporated metadata servicing for events</li></ul>	
<b>Software Intern at LocateAI</b>	06/2017-08/2017
<ul style="list-style-type: none"><li>• Full stack engineering role, was responsible for end to end feature development for LocateAI's web app</li><li>• Built and designed database, backend logic, and UI/UX for data engine features which allowed users to upload and visualize thousands of data points at any time, and improved users' data upload/retrieval speed</li><li>• Developed permissions functionality where admins of group accounts can login as any user</li></ul>	
<b>Software Intern at Huna Makia Inc.</b>	01/2017
<ul style="list-style-type: none"><li>• Designed and built a Chrome extension that eases the process of job recruitment</li><li>• Developed features (a feed of suggested candidates, different search categories) to enhance the main web application, and improved the app by incorporating my ideas as well as customer feedback</li></ul>	
<b>LED Smart Mirror</b>	09/2016-12/2016
<ul style="list-style-type: none"><li>• Built a mirror that displays time, weather, etc. by overlaying a two-way mirror on a monitor and laser-cutting a case and frame, set up a chromium kiosk with a raspberry pi, and created a webpage to display on the monitor</li></ul>	
<b>Research Assistant, Department of Computational Chemistry, UNT</b>	09/2014-05/2016
<ul style="list-style-type: none"><li>• 2016 National Barry M. Goldwater Scholar and Intel STS 2016 Semifinalist</li><li>• Constructed models for the behavior of semiconducting material using ab initio computational methods</li><li>• Co-authored the paper for this research and was published in the Journal of Physical Chemistry A</li></ul>	

## Leadership

<b>Leader, MIT Syncopasian</b>	09/2016-present
<ul style="list-style-type: none"><li>• <b>As President:</b> Represented the group in communications with all other organizations, guided committee heads, and moderated discussions within the group</li><li>• <b>As Music Director (present):</b> Teach music, plan and lead rehearsals, improve the group's technique and blend</li></ul>	
<b>President, TAMS Computer Science Organization</b>	05/2015-06/2016
<ul style="list-style-type: none"><li>• Created lesson plans and coached programming teams, some of which placed at state level competitions</li><li>• Coordinated, organized, and wrote tests for TAMS Tournament, a state-wide math and science competition</li></ul>	
<b>Aspire Exposition Coordinator</b>	10/2014-05/2016
<ul style="list-style-type: none"><li>• Engaged elementary students with science lessons / demos to inspire them to embrace curiosity and research</li></ul>	