


# EVAN TEY

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EDUCATION	<b>Massachusetts Institute of Technology</b> Candidate for M. Eng. in Computer Science – 5.0/5.0 B.S. in Physics and Computer Science – 4.7/5.0	June 2020 June 2019
EXPERIENCE	<b>Generative Model for Stellar Spectra</b> – <i>Researcher, MIT</i> <ul style="list-style-type: none"><li>• todo</li></ul> <b>Kensho</b> – <i>Part-Time Software Engineer</i> <ul style="list-style-type: none"><li>• todo</li></ul> <b>Project Invent</b> – <i>Winter Extern</i> <ul style="list-style-type: none"><li>• Worked at an early-stage non-profit to bring invention education to teachers and students across the country</li><li>• Contributed to program design, strategy meetings, and fundraising development</li></ul> <b>Bayesian Modeling of Supernovae</b> – <i>Researcher, Imperial College London</i> <ul style="list-style-type: none"><li>• Developed and tested a hierarchical Bayesian model for selection effects in supernovae lightcurves to better infer parameters about our universe</li></ul> <b>NuSTAR X-Ray Analysis of the Galactic Center</b> – <i>Researcher, MIT</i> <ul style="list-style-type: none"><li>• Analyzed high energy spectra near the Galactic Center to characterize and constrain dark matter candidates with Python, Sherpa, and HEASoft software</li></ul> <b>MIT Office of Open Learning</b> – <i>Data Science Researcher</i> <ul style="list-style-type: none"><li>• Prepared a student feedback tool for instructors to experiment on how various feedback impacts student behavior with Flask and Google BigQuery</li></ul> <b>Indeed</b> – <i>Software Engineer Intern</i> <ul style="list-style-type: none"><li>• Created a predictive data-driven decision-making system to increase SEO acquisition for job result pages with Java, Hadoop, Pig Latin, and Git</li></ul> <b>Mathworks at Texas State University</b> – <i>Honors Summer Math Camp Counselor</i> <ul style="list-style-type: none"><li>• Counseled a group of four high school students in Combinatorics and Real Analysis</li><li>• Ran additional review sessions and assisted a Mathematica class</li><li>• Worked with 15 other counselors to maintain a nurturing camp environment</li></ul> <b>Mathworks at Texas State University</b> – <i>Research Assistant</i> <ul style="list-style-type: none"><li>• Characterized negativity in hypergraph structure to enhance our understanding of deficiencies in neural / social / magnetic networks</li></ul>	Mar '19 – present  Spring '19  Jan '19  Summer '18  Sep '17 – Jun '18  Jun '17 – Jan '18  Summer '16  Summer '15  Summer '14
PROJECTS	<b>Educational Telescope with VR</b> <ul style="list-style-type: none"><li>• Building a real 10" f/5 Dobsonian telescope with additional sensors and a screen to emulate telescope usage for use on cloudy nights</li></ul> <b>Consensus</b> <ul style="list-style-type: none"><li>• Used the design process to lead a team of six in creating a live classroom tool that reduces confusion between students and teachers</li><li>• Interviewed teachers, then prototyped and tested several features before developing a simple webapp to track users, questions, and confusion in the classroom</li></ul> <b>Align</b> <ul style="list-style-type: none"><li>• Constructed a device to detect bad posture and give haptic feedback with flex sensors and an Arduino in a team of six</li></ul> <b>Concrete Convolutional Neural Network Cryptosystem</b> <ul style="list-style-type: none"><li>• Replicated and extended Google Brain's paper <i>Learning to Protect Communications with Adversarial Neural Cryptography</i> with a team of three</li></ul>	Spring '18  Spring '16  Spring '16  Fall '16

	<b>3D Scanner</b> <ul style="list-style-type: none"> <li>Built a 3D laser scanner to generate and display a point cloud from an object using an FPGA</li> <li>Rendered and allowed interaction with the point cloud through VGA output</li> </ul>	Fall '16
	<b>Pygmy ProSet</b> <ul style="list-style-type: none"> <li>Created a live multiplayer version of the card game ProSet with NodeJS, socket.io, and JQuery</li> </ul>	Fall '15
	<b>LASA UIL Study Site</b> <ul style="list-style-type: none"> <li>Developed a quizzing website to help novice CS students learn general programming principles</li> <li>Parsed PDFs of computer science tests to a question database using MongoDB, Javascript, NodeJS, Jade, and JQuery</li> </ul>	Fall '14
TEACHING	<b>MIT Undergraduate Mathematics for Computer Science – Graduate TA</b> <ul style="list-style-type: none"> <li>todo</li> </ul>	Sep '19 – present
	<b>MIT Spokes – Organizer &amp; Participant</b> <ul style="list-style-type: none"> <li>Biked across the country and taught STEM workshops at local schools / libraries with seven other MIT students</li> </ul>	Summer '19
	<b>Educational Studies Program – Admin</b> <ul style="list-style-type: none"> <li>Organized programs for middle/high schoolers to take classes from MIT students about anything from Surfboard Design to Quantum Mechanics to European Separatist Movements</li> <li>Directed Splash (over 2000 students and 500 teachers) through managing a 40 person admin team</li> <li>Taught classes on astronomy, statistical mechanics, algorithms, and more</li> </ul>	Feb '16 – Jun '19
	<b>Undergraduate Math Department – Peer Tutor</b> <ul style="list-style-type: none"> <li>Tutored MIT undergraduates in single- and multi-variable calculus, differential equations, and linear algebra for 4 hours a week</li> </ul>	Feb '16 – Dec '17
	<b>MIT Undergraduate Electricity &amp; Magnetism – Undergraduate TA</b> <ul style="list-style-type: none"> <li>Coached MIT undergraduates through physics problems for 5 hours a week</li> </ul>	Spring '17
	<b>AP Computer Science – TA</b> <ul style="list-style-type: none"> <li>Assisted AP Computer Science students during class by creating worksheets and helping students learn how to debug programs</li> </ul>	Aug '13 – May '14
	<b>Scratch Camp – Cofounder</b> <ul style="list-style-type: none"> <li>Designed and ran a camp to stimulate computer science interest in Pearce Middle School students</li> </ul>	Spring '13
AWARDS	<b>8th Int'l Olympiad on Astronomy and Astrophysics – Honorable Mention</b> <ul style="list-style-type: none"> <li>Represented the USA in theory, observation, and data analysis exams over ten days in Romania</li> </ul>	Aug '14
SKILLS	<b>Hard:</b> Python, Jupyter, Numpy, Pandas, Tensorflow, Git, Javascript, Node, Java, Linux <b>Soft:</b> Leadership, Data Science, Design Thinking, Rapid Prototyping <b>Interests:</b> Stargazing, Education, Soccer, Food	