

# LILLIAN CHIN

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## EDUCATION

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|---|---|
| <b>Massachusetts Institute of Technology (MIT)</b><br><i>PhD in Electrical Engineering and Computer Science</i><br><i>Thesis Advisor: Daniela Rus</i> | <b>2017 – 2022 (expected)</b><br><i>Cambridge, MA</i> |
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| <b>Massachusetts Institute of Technology (MIT)</b><br><i>B.S. in Electrical Engineering and Computer Science</i><br><i>Minors in Mechanical Engineering, Comparative Media Studies</i> | <b>June 2017</b><br><i>Cambridge, MA</i><br><i>GPA: 4.9/5.0</i> |
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## HONORS

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|   |             |
|---|-------------|
| <b>Hertz Foundation Graduate Fellowship</b>                     | <b>2018</b> |
| <b>Paul and Daisy Soros Fellowship for New Americans</b>        | <b>2018</b> |
| <b>National Science Foundation Graduate Research Fellowship</b> | <b>2018</b> |
| <b>MIT Energy Initiative Graduate Fellowship</b>                | <b>2018</b> |
| <b>Phi Beta Kappa Honors Society, Xi Chapter</b>                | <b>2017</b> |

## PUBLICATIONS

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### Peer-Reviewed Journal Articles

- [J.3] Lipton, J., MacCurdy, R., Manchester, Z., **Chin, L.**, Celluci, D., & Rus, D. "Handedness in Shearing Auxetics Creates Rigid and Compliant Structures." *Science*. 360(6389): 632-635. (2018)
- [J.2] Stevens, A., Oliver, R., Kirchmeyer, M., Wu, J., **Chin, L.**, Polsen E., Archer, C., Boyle, C., Garber, J., and Hart, J. "Conformal robotic stereolithography." *3D Printing and Additive Manufacturing*, 3(4): 226-235. (2016)
- [J.1] Harrow, C. and **Chin, L.** "Technology-Enhanced Discovery." *Mathematics Teacher*, **107**: 660 – 665. (2014)

### Peer-Reviewed Conference Papers

- [C.2] **Chin, L.**, Lipton, J., MacCurdy, R., Romanishin, J., Sharma, C., & Rus, D. "Compliant Electric Actuators Based on Handed Shearing Auxetics." In *Soft Robotics (RoboSoft), 2018 IEEE International Conference on*. IEEE. (2018).
- [C.1] Beaudoin J., **Chin L.**, Zlotnick H., Cervantes T., Lassey S., Robinson J., Slocum A. "Obstetrical Forceps with Passive Rotation and Sensor Feedback". ASME. *Frontiers in Biomedical Devices, 2018 Design of Medical Devices Conference*. (2018).

## RESEARCH AND WORK EXPERIENCE

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|---|-----------------------|
| <b>MIT Computer Science &amp; Artificial Intelligence Lab., Distributed Robotics Group</b><br><i>Graduate Researcher with Dr. Daniela Rus</i> | <b>2017 – present</b> |
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| <b>Toyota Research Institute</b><br><i>Robotics Research Intern with Dr. Russ Tedrake</i> | <b>Summer 2017</b> |
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| <b>MIT Computer Science &amp; Artificial Intelligence Lab., Distributed Robotics Group</b><br><i>Undergraduate Researcher with Dr. Daniela Rus</i> | <b>2016 – 2017</b> |
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| <b>MIT Dept. of Mechanical Engineering, Mechanosynthesis Group</b><br><i>Undergraduate Researcher with Dr. John Hart</i> | <b>2014 – 2017</b> |
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| <b>Apple</b><br><i>iPad Hardware Systems Integration, Electrical Engineering Intern</i> | <b>Summer 2016</b> |
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| <b>Square</b><br><i>Electrical Engineering Intern</i> | <b>Summer 2015</b> |
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| <b>MIT Media Lab, Biomechatronics Group</b><br><i>Undergraduate Researcher with Dr. Hugh Herr</i> | <b>2015</b> |
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**Coursera**  
*Software Engineering Intern*

**Summer 2014**

**Georgia Institute of Technology, Department of Mechanical Engineering**  
*Research Intern with Dr. Michael Leamy*

**2011 – 2013**

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#### TEACHING EXPERIENCE

##### **Academic**

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| Teaching Assistant, MIT 6.146 – Mobile Autonomous Systems Laboratory | <b>2017</b>        |
| Head Lab Assistant, MIT 6.002 – Circuits and Electronics             | <b>2015 – 2017</b> |
| Lab Assistant, MIT 6.004 – Computation Structures                    | <b>Fall 2016</b>   |

##### **Extracurricular**

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| Mentor, MIT Women in Electrical Engineering and Computer Science | <b>2018 – present</b> |
| Mentor and Library Machine Master, MIT MakerWorkshop             | <b>2017 – present</b> |
| Teacher, MIT Educational Studies Program                         | <b>2013 – present</b> |
| Tutor, InstaEDU / Chegg Tutors                                   | <b>2014 – 2017</b>    |
| Mentor, Girls Who Code   | <b>2015</b>           |
| Mentor, Society of Women Engineers                               | <b>2014</b>           |

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#### CURRENT AND FORMER RESEARCH STUDENTS SUPERVISED

##### **Undergraduate Students**

|                         |                       |
|-------------------------|-----------------------|
| Jacob Miske             | <b>2018 – present</b> |
| Chetan Sharma [C.2]     | <b>2017 – present</b> |
| Dani Gonzalez           | <b>2018</b>           |
| Antares McCoy-Villaneda | <b>2018</b>           |

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#### PROFESSIONAL SERVICE

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| Reviewer, IEEE International Conference on Soft Robotics | <b>2018</b> |
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#### LEADERSHP EXPERIENCE

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| Treasurer, MIT Sporting Clays Association   | <b>2018 – present</b> |
| President and Founder, Free Fossils MIT   | <b>2014 – present</b> |
| Chair, MIT Undergrad. Association: Student-Administration Collaboration Committee | <b>2015 – 2017</b>    |
| Member, MIT Medlinks  | <b>2013 – 2017</b>    |
| Captain, Lead Coder, and Founder, Westminster Robotics Teams                      | <b>2010 – 2013</b>    |

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#### SIDE PROJECTS

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| <b>2.72 – Elements of Machine Design</b> | <b>2016</b> |
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Desktop lathe that maintained 50 micron precision even after being dropped. Won first place for highest accuracy

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| <b>MIT Mobile Autonomous Systems Laboratory</b> | <b>2016</b> |
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Cube-stacking autonomous robot. Won first place, best software, best wiki and "most likely to be staff" award

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| <b>MakeMIT</b> | <b>2014</b> |
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Guitar-playing robot that uses solenoids to strum and a rack-and-pinion setup to fret. Won first place.