

# Rohan Chitnis

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Education	<p><b>Massachusetts Institute of Technology, Cambridge, MA</b> PhD in Computer Science, May 2021 (expected).</p> <p><b>University of California, Berkeley, Berkeley, CA</b> <b>Graduated with Highest Honors (GPA in top 3%). GPA: 3.951 / 4.0.</b> Bachelor of Science in Electrical Engineering and Computer Sciences, May 2016.</p>
Experience	<p><b>Airbnb Inc., San Francisco, CA</b> (Software Engineering Intern) 06/2016 - 08/2016</p> <ul style="list-style-type: none"><li>• Worked on incorporating mobile data into machine learning models used by the Search Ranking team. Collected and organized data using tools in Hive, Presto, and Scala.</li></ul> <p><b>UC Berkeley Robot Learning Lab</b> (Adviser: Pieter Abbeel) 02/2013 - 05/2016</p> <ul style="list-style-type: none"><li>• Performed work in (hierarchical) combined task and motion planning for execution of long-horizon tasks.</li><li>• Integrated reinforcement learning to improve existing approaches.</li><li>• Lead coordinator of lab outreach program, providing tours to visitors of varied ages.</li></ul> <p><b>UC Berkeley Oscii Lab</b> (Adviser: John DeNero) 04/2015 - 05/2016</p> <ul style="list-style-type: none"><li>• Conducted research in Natural Language Processing.</li><li>• Worked on improving performance of neural machine translation, which uses a recurrent neural network with an attention mechanism for machine translation, by introducing novel Huffman code compression techniques.</li></ul> <p><b>eBay Inc., San Jose, CA</b> (Software Engineering Intern) 05/2014 - 08/2014</p> <ul style="list-style-type: none"><li>• Developed an end-to-end pipeline involving data querying and machine learning to build a classification model for checkout transactions, used in determining whether to offer buyers the option to place items on hold.</li><li>• Collected data using Hadoop MapReduce under the Apache Pig framework.</li><li>• Model achieved 85% accuracy on noisy data sets, using AdaBoost with a decision tree.</li></ul>
Selected Publications	<p><b>Guided Search for Task and Motion Plans Using Learned Heuristics.</b> Rohan Chitnis, Dylan Hadfield-Menell, Abhishek Gupta, Siddharth Srivastava, Pieter Abbeel. Proceedings of the IEEE International Conference on Robotics and Automation (ICRA), 2016.</p> <p><b>Learning an Interface to Improve Efficiency in Combined Task and Motion Planning.</b> Rohan Chitnis, Dylan Hadfield-Menell, Siddharth Srivastava, Abhishek Gupta, Pieter Abbeel. Proceedings of the IROS Workshop on Machine Learning in Planning and Control of Robot Motion (MLPC), 2015.</p> <p><b>Variable-Length Word Encodings for Neural Translation Models.</b> Rohan Chitnis, John DeNero. Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP), 2015.</p> <p><b>Combined Task and Motion Planning Through an Extensible Planner-Independent Interface Layer.</b> Siddharth Srivastava, Eugene Fang, Lorenzo Riano, Rohan Chitnis, Stuart Russell, Pieter Abbeel. Proceedings of the IEEE International Conference on Robotics and Automation (ICRA), 2014.</p>
Honors/ Awards	<p>NSF GRFP Fellow, 2016. Awarded NDSEG Fellowship (declined).</p> <p>Hertz Fellowship Finalist, 2016. One of 40 finalists nationwide.</p> <p>Runner-up for the CRA Outstanding Undergraduate Male Researcher Award, 2016.</p> <p>Sole recipient of the EECS Mark D. Weiser Excellence in Computing Scholarship, 2015.</p> <p>Member of the EECS Honors Degree Program.</p> <p>UC Berkeley Outstanding Graduate Student Instructor (OGSI) Award recipient, 2015.</p> <p>UC Berkeley Regents' and Chancellor's Scholar.</p> <p>National Merit Scholar.</p>
Technical Skills	<p><b>Fluency in:</b> Python, Java, Scala, C, C++, Scheme, LaTeX.</p> <p><b>Software:</b> Unix/Linux, Robot Operating System (ROS), OpenCV, MongoDB, Apache Pig, Apache Spark, Hadoop MapReduce, scikit-learn, scikit-image.</p>