

Rohan Chitnis

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Education	<p>Massachusetts Institute of Technology, Cambridge, MA GPA: 4.8 / 5.0. Minor: Econometrics. Doctor of Philosophy in Electrical Engineering and Computer Science, 2022 (expected). Master of Science in Electrical Engineering and Computer Science, May 2018.</p> <p>University of California, Berkeley, Berkeley, CA Graduated with Highest Honors (GPA in top 3%). GPA: 3.95 / 4.0. Bachelor of Science in Electrical Engineering and Computer Sciences, May 2016.</p>
Experience	<p>MIT Learning & Intelligent Sys. Lab (Adviser: Leslie Kaelbling) 09/16 - Present</p> <ul style="list-style-type: none">• Conduct research in artificial intelligence for robotics, toward a PhD.• Focus on inference, planning, and learning for human-robot interactive settings. <p>Facebook AI Research, Robotics (Research Intern with Abhinav Gupta) 06/19 - 09/19</p> <ul style="list-style-type: none">• Researched formulations of intrinsic motivation for emergence of synergistic behavior in robotics via deep reinforcement learning.• Built and tested my algorithms in real-world bimanual manipulation environments. <p>Google Brain, Robotics (Research Intern with Sergey Levine) 05/17 - 09/17</p> <ul style="list-style-type: none">• Researched methods for speeding up deep reinforcement learning for robotics, by regressing on event outcomes to improve exploration. <p>Airbnb Inc., Search Ranking (Software Engineering Intern) 06/16 - 08/16</p> <ul style="list-style-type: none">• 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. <p>UC Berkeley Robot Learning Lab (Adviser: Pieter Abbeel) 02/13 - 05/16</p> <ul style="list-style-type: none">• Performed work in hierarchical combined task and motion planning.• Lead coordinator of lab outreach program, providing tours to visitors of varied ages. <p>eBay Inc., Checkout (Software Engineering Intern) 05/14 - 08/14</p> <ul style="list-style-type: none">• Developed an end-to-end pipeline to create a model that classifies checkout transactions.• Collected data using Hadoop MapReduce under the Apache Pig framework.
Selected Publications	<p>Intrinsic Motivation for Encouraging Synergistic Behavior. Rohan Chitnis, Shubham Tulsiani, Saurabh Gupta, Abhinav Gupta. 2020 Int'l Conference on Learning Representations (ICLR).</p> <p>Learning Compact Models for Planning with Exogenous Processes. Rohan Chitnis, Tomás Lozano-Pérez. 2019 Conference on Robot Learning (CoRL).</p> <p>Learning Quickly to Plan Quickly Using Modular Meta-Learning. Rohan Chitnis, Leslie Pack Kaelbling, Tomás Lozano-Pérez. 2019 Int'l Conference on Robotics and Automation (ICRA).</p> <p>Learning What Information to Give in Partially Observed Domains. Rohan Chitnis, Leslie Pack Kaelbling, Tomás Lozano-Pérez. 2018 Conference on Robot Learning (CoRL).</p> <p>Guided Search for Task and Motion Plans Using Learned Heuristics. Rohan Chitnis, Dylan Hadfield-Menell, Abhishek Gupta, Siddharth Srivastava, Edward Groshev, Christopher Lin, Pieter Abbeel. 2016 Int'l Conference on Robotics and Automation (ICRA).</p>
Honors / Awards	<p>Facebook Fellowship Finalist (Machine Learning track), 2020. Top 4% of applicants.</p> <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 Researcher Award, 2016.</p> <p>Sole recipient of the EECS Mark D. Weiser Excellence in Computing Scholarship, 2015.</p> <p>UC Berkeley Outstanding Graduate Student Instructor (OGSI) Award recipient, 2015.</p> <p>UC Berkeley Regents' and Chancellor's Scholar.</p>
Technical Skills	<p>Languages: Python, Java, Scala, C, C++, LaTeX.</p> <p>Software: PyTorch, TensorFlow, Theano, Unix/Linux, Robot Operating System (ROS), OpenCV, Apache Pig, Apache Spark, Hadoop MapReduce.</p>