Mark **Edmonds**

ARTIFICAL INTELLIGENCE · COGNITIVE SCIENCE · ROBOTICS

✉ mark@mjedmonds.com | 🏠 mjedmonds.com | 🐙 | 🔍 | 🔗

Education

University of California, Los Angeles — Los Angeles, CA
Ph.D. in Computer Science, Artifical Intelligence Concentration; Advisor: Prof. Song-Chun Zhu — *Expected Jun 2021*

University of California, Los Angeles — Los Angeles, CA
M.S. in Computer Science; Advisor: Prof. Song-Chun Zhu — *Jun 2017*

University of Dayton — Dayton, OH
B.S. in Computer Engineering; Magna Cum Laude; Advisor: Prof. Tarek Taha — *May 2015*

Skills

Programming	Python, C/C++, Shell, LaTeX, Matlab, Javascript, HTML5, CSS, Node.JS, Java, CUDA
Topics	Machine Learning, Graphical Models, Reinforcement Learning, Bayesian Networks, Statistical Modeling

Experience

University of California, Los Angeles — Los Angeles, CA
Graduate Student Researcher, Computer Science Department — *Sep 2015 - Present*
- Studying causal learning for generalization and transfer learning by using causal theory induction. Compared against human performance to understand how humans reason about causal representations.
- Investigating explainable AI (XAI) to foster human trust by using communicative learning and interpretable robot policies.
- Studied imitation learning with a tactile glove to transfer complex human manipulation demonstrations by using a haptic neural network and an And-Or Graph.

Santa Monica College — Santa Monica, CA
Adjunct Professor, Computer Science Department — *Jun 2016 - Present*
- CS 80, Internet Programming, a class focused on HTML, CSS, JavaScript, MySQL, and PHP.
- CS 50, Introduction to C Programming, a class focused on C fundamentals.
- CS 52, Introduction to C++ Programming, a class focused on C++ fundamentals.

International Center for AI and Robot Autonomy — Los Angeles, CA
Robotics Research Engineer Intern — *Jun 2018 - Mar 2020*
- Built virtual environment for embodied AI that couples language and vision to learn transferrable representations of the environment.

UCLA Radio — Los Angeles, CA
Deep End Theory Podcast Host — *Jan 2016 - Jan 2020*
- Hosted a podcast focused on electronic music that garnered tens of thousands of plays and interviewed some of my favorite electronic music producers.

Garmin International — Olathe, KS
Software Engineering Intern, Aviation Department — *May 2013 - Aug 2013*
- Reduced testing time by 40% for the Datalink team by optimizing timing protocols while adhering to safety standards, saving hundreds of vendor-certification testing time hours.

Cristo Rey Kansas City High School — Kansas City, MO
Summer School Teacher — *May 2011 - Aug 2012*
- Taught pre-calculus and chemistry at a high school focused on college placement for underrepresented groups.

Publications

- Three journal publications in *Science Robotics*, *Engineering*, and *TPDS*. *Science Robotics* article covered by media outlets such as *IEEE Spectrum*, *Cosmos Magazine*, and *The Conversation*.
- Seven conference publications published in *AAAI*, *CVPR*, *IROS*, *ICRA*, and *CogSci* (first-author of five; oral presentations at four).
- For a complete list of publications, please see my CV, my website (mjedmonds.com) or Google Scholar (ycAoqlAAAAAJ).