

# Edward Hu

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I aim to be a research scientist or software engineer working on projects with technological and social impact.

## EDUCATION

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### University of Southern California

Los Angeles, CA

- *Bachelor of Science in Computer Science; GPA: 3.72*

*Aug. 2015 – May. 2019*

*Master of Science in Computer Science; GPA: NA*

*Aug. 2019 – May. 2020*

Exceptional undergraduate students can start graduate-level classes during their senior year and earn the M.S. in Computer Science with one or two additional semesters of study

## PUBLICATIONS

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- Y Lee, SH Sun, S Somasundaram, **E Hu**, JJ Lim, “Composing Complex Skills by Learning Transition Policies with Proximity Reward Induction,” in *Seventh International Conference on Learning Representations*, 2019.

## EXPERIENCE

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### USC Cognitive Learning for Vision and Robotics Lab

Los Angeles, CA

- *Undergraduate Research Assistant*

*May 2018 - Present*

- **Research Interests:** Projects, papers focused on Deep Learning, Reinforcement Learning, Meta Learning
- **Other Duties:** Participate in weekly paper reading group and write paper summaries on personal blog

### Tesla

Fremont, CA

- *Software Engineering Intern*

*May 2018 - Aug 2018*

- **Model 3 Production Optimization with NLP:** Created NLP classification pipeline to triage and classify 200,000 Model 3 Production issues.
- **Manufacturing Operating System (MOS):** Fullstack implementation of mission-critical production dashboards on MOS using Angular, Go, and SQL to aid 5000 Model 3 cars per week efforts

### Intel

Hillsboro, Oregon

- *Machine Learning Intern*

*May 2017 - Aug 2017*

- **Applied Reinforcement Learning:** Automated thermal tuning process for laptops CPUs, saving up to 80 hours of engineering time per tuning cycle by learning thermal policy
- **Deep Q-Network in Production:** Implemented production tuning tool using Deep Q Network with TF

### Code The Change

Los Angeles, CA

- *Technical Lead*

*May 2015 - Present*

- **Coding for Social Good:** CTC is a student organization that builds software products for LA nonprofits on a yearly cycle. Three project teams, each consisting of a PM, Technical Lead, Designers, and Developers. Products are built through agile development.
- **Technical Leadership:** As tech lead for my team, I plan the software architecture, setup boilerplate, review pull requests, and pair program with junior developers.

## PROJECTS

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- **Deep Symphony:** Deep Learning Class Final Project; Generate classical music with neural networks. Explored RNN, word2vec embeddings, seq2seq, WGAN, SeqGAN. 1st place in 2 categories, best demo and writeup, won \$4000.
- **Medmind:** React Native app that uses computer vision to streamline drug management for cancer patients.
- **Rudi the Chatbot:** Chatbot that provides realtime housing and legal information to released LA inmates to reduce recidivism rates. Collaborated with LA nonprofit Center for Health Justice for testing.
- **LA Mayor’s Data Dashboard:** Data dashboard featuring statistics like average job gain, 311 response time, etc. Improved existing dashboard by adding realtime updates of 30 metrics through python scraping and Google Sheets API.

## CLASSES AND SKILLS

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- **Classes:** Multivariate Calculus, Linear Algebra, Probability/Statistics, Data Structures, Algorithms, Graphics, Videogame Programming, Operating Systems, Professional C++, Artificial Intelligence, Deep Learning (grad), Machine Learning (grad)
- **Languages / Skills:** Python, Java, C++, Javascript, Pytorch, Tensorflow, Numpy, Node.js, React (Native), Swift, Android, SQL, Mongo