

Ayush Jain

Cognitive Learning for Vision and Robotics Lab
Computer Science Department, USC

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EDUCATION

University of Southern California
PhD in Computer Science, GPA: 4.0

Aug 2018 - Present

Indian Institute of Technology Delhi
B.Tech in Electrical Engineering, GPA: 8.991/10

July 2012 - June 2016

RESEARCH INTERESTS

Reinforcement Learning, Representation Learning, Generalization

PUBLICATIONS

- **Ayush Jain***, Norio Kosaka*, Kyung-Min Kim, Joseph J Lim. Know Your Action Set: Learning Action Relations for Reinforcement Learning. International Conference on Learning Representations (**ICLR**), 2022. [\[Paper\]](#)
- **Ayush Jain***, Andrew Szot*, and Joseph J Lim. Generalization to New Actions in Reinforcement Learning. International Conference on Machine Learning (**ICML**), 2020. [\[Paper\]](#) | [\[Talk\]](#) | [\[Environment\]](#)
- **Ayush Jain**, Vishal Singh, Sidharth Ranjan, Rajakrishnan Rajkumar, Sumeet Agarwal. “Uniform Information Density Effects on Syntactic Choice in Hindi”. In Proceedings of the Workshop on Linguistic Complexity and Natural Language Processing, COLING 2018, Santa Fe. [\[Paper\]](#)
- **Ayush Jain**, Vishal Singh, Sumeet Agarwal, and Rajakrishnan Rajkumar. “Uniform Information Density models for language production”. Abstract Presentation at 39th Annual Conference of the German Linguistic Society (DGfS), 2017. [\[Abstract\]](#) | [\[Slides\]](#)

INDUSTRY EXPERIENCE

- **Research Intern, Naver Research**, Seoul, South Korea (remote) June 2021 – Present
Varying action space and Benchmarking in Reinforcement Learning for Recommender Systems.
- **Engineer, Samsung Research**, Seoul, South Korea September 2016 – June 2018
Market Prediction, Anomaly Detection, Information Extraction & Data Unification.
- **Intern, Samsung Electronics**, Suwon, South Korea May 2015 – July 2015
Smart Thermostat schedule learning algorithm
- **Intern, AVL Technical Center Pvt. Ltd.**, Gurgaon, India May 2014 – July 2014
Optimizing calibrations for Electronic Control Unit in automobiles

ACHIEVEMENTS

- Selected among 30 students to attend national orientation camp for International Olympiad on Astronomy and Astrophysics (IOAA) 2012 by qualifying Indian National Astronomy Olympiad.
- Secured an All India Rank of 198 in IITJEE 2012 taken by over half a million students.
- Secured an All India Rank of 91 in AIEEE 2012 taken by over a million students.
- Awarded Central Board of Secondary Education Merit Certificate for securing India top 0.1% (2012).
- Awarded the Director’s award for being in the top 7% of the institute for three semesters (2013-14).
- Recipient of KVPY Fellowship award and National Talent Search Examination Scholarship award.
- Secured an All India Rank of 3 in National Science Talent Search Examination (NSTSE) 2011.

TEACHING

- Teaching Assistant, CSCI566: Deep Learning and its Applications, USC Fall 2019, Fall 2020
- Teaching Assistant, CSCI599: Deep Learning and its Applications, USC Spring 2019