

Nicolas Espinosa Dice

✉ ne229@cornell.edu
📄 nico-espinosadice.github.io
in nicolas-espinosa-dice
🌐 nico-espinosadice
Nicolas Espinosa Dice

Education

- 2023– Present **Ph.D., Computer Science, Cornell University**
Advisor: Wen Sun
Research Areas: Reinforcement Learning, Imitation Learning, Generative Models
- 2022 **B.S., Mathematics and Computer Science, Harvey Mudd College**
Advisors: George D. Montanez and Dagan Karp
Graduated with High Distinction and Departmental Honors in Mathematics and Computer Science.

Research Experience

- 2023– Present **Department of Computer Science, Cornell University**
Advisor: Wen Sun
Research Focus: How can agents learn from both *interaction* and *offline data*: what can be done *offline* to better learn/explore/fine-tune *online*?
- 2020–2022 **AMISTAD Lab, Harvey Mudd College**
Advisor: George D. Montanez
Developed a probabilistic model of abductive reasoning, and derived generalization error bounds of learning algorithms in an algorithmic search framework.

Industry Experience

- 2022–2023 **Research Scientist, Dasion**
Advisor: Weiqing Gu
Developed an audio-based model capable of detecting Autism Spectrum Disorder in children, contributing to a successful NSF SBIR Phase I Project Pitch, and co-authored successful NSF SBIR Phase II Proposal.
- Summer 2022 **Machine Learning Intern, Dasion**
Advisor: Weiqing Gu
Developed a temporal graph convolutional network (T-GCN) model to detect seizures in electroencephalogram (EEG) data.
- 2021–2022 **Project Lead, Clinic Program, Harvey Mudd College**
Project lead of undergraduate team working with Rockerbox that built an anomaly detection model on time-series marketing data.
- Summer 2021 **Software Engineer Intern, Etsy**
Developed a transformer-based deep learning model with DistilBERT architecture using Tensorflow to classify safe search queries.
- Summer 2019 **Software Engineer Intern, Viasat**
Built a heads-up display on a Microsoft HoloLens, integrated with data from Link 16 radio network. Presented by Viasat at AUSA 2019.

Publications

- [1] **Nicolas Espinosa-Dice**, Kianté Brantley, Wen Sun. *Expressive Value Learning for Scalable Offline Reinforcement Learning*. arXiv Preprint, 2025.
- [2] **Nicolas Espinosa-Dice**, Yiyi Zhang, Yiding Chen, Bradley Guo, Owen Oertell, Gokul Swamy, Kianté Brantley, Wen Sun. *Scaling Offline RL via Efficient and Expressive Shortcut Models*. Neural Information Processing Symposium (NeurIPS), 2025.
- [3] **Nicolas Espinosa-Dice**, Sanjiban Choudhury, Wen Sun, Gokul Swamy. *Efficient Imitation Under Misspecification*. International Conference on Learning Representations (ICLR), 2024.
- [4] **Nicolas Espinosa-Dice**, Gokul Swamy, Sanjiban Choudhury, Wen Sun. *Efficient Inverse Reinforcement Learning without Compounding Errors*. Reinforcement Learning Conference (RLC) Safety Workshop, 2024.
- [5] Ramya Ramalingam, **Nicolas Espinosa-Dice**, Megan L Kaye, George D Montañez. *Bounding Generalization Error Through Bias and Capacity*. International Joint Conference on Neural Networks (IJCNN), 2022.
- [6] **Nicolas Espinosa-Dice**, Megan Kaye, Hana Ahmed, George Montañez. *A Probabilistic Theory of Abductive Reasoning*. International Conference on Agents and Artificial Intelligence (ICAART), 2021.

Teaching

- 2024 **Teaching Assistant**, *Foundations of Reinforcement Learning*, Cornell University
- 2021 **Grader and Tutor**, *Artificial Intelligence*, Harvey Mudd College

Outreach and Reviewing

- 2024–
Present **Graduate Student Mentor**, *Department of Computer Science*, Cornell University
- 2025 **Conference Reviewer**, ICLR 2024, ICLR 2025, NeurIPS 2025 ARLET Workshop
- 2024 **ASCEND Mentor**, *Department of Computer Science*, Cornell University
- 2021 **Judiciary Chair**, *Honor Board*, Harvey Mudd College
- 2020 **Public Outreach Director**, *Society of Professional Latinx in STEM*, Harvey Mudd College

Fellowships

- 2025 **NSF Graduate Research Fellowship Program**, National Science Foundation
- 2025 **Bowers-CIS LinkedIn Fellowship** (Declined), LinkedIn
- 2023 **Hopper-Dean and Bowers Fellowship**, Cornell University
- 2018 **Harvey S. Mudd Merit Award**, Harvey Mudd College

Awards

- 2023 **Dean’s Scholar**, Cornell University
- 2022 **Departmental Honors in Computer Science**, *Harvey Mudd College*
- 2022 **Departmental Honors in Mathematics**, *Harvey Mudd College*
- 2022 **Don Chamberlain Computer Science Research Award**, *Harvey Mudd College*
Second student at Harvey Mudd to win both Chamberlain Research and Clinic Program Individual Awards
- 2022 **Clinic Program Individual Award**, *Harvey Mudd College*