Rohan Taori

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Education

University of California, Berkeley

Aug '16 - May '19

B.S. in Electrical Engineering and Computer Science

GPA: 3.98

Awards: Regents' & Chancellor's Scholar (2% of students), Highest Honors & Dean's List (3% of engineers) Memberships: Eta Kappa Nu (HKN) honor society, 2019 Accel Scholar (VC firm Accel and Berkeley)

Research & Work Experience

Uber ATG – AI Research Resident

Sep '19 - Present

· Working on understanding and improving the reliability of autonomous driving systems

Berkeley AI Research – Undergraduate Researcher

Aug '16 - Present

- Worked with Prof. Ben Recht on understanding robustness in real-world distribution shifts
 Study was the largest to date: compared 150+ models with 200+ ImageNet distribution shifts
- Worked with Prof. Jitendra Malik on sample efficient deep RL using non-parametric value functions
- Worked with Prof. Carlo Séquin on finding optimal solutions of irregular solids via gradient descent

NVIDIA – Deep Learning Research Intern

May - Aug '19

• Worked on new techniques for large-scale texture synthesis in near real-time for arbitrary textures Developed a new architecture which improves generalization to unseen textures

Also previously a software engineering intern at Facebook, Salesforce, and Xamarin (Microsoft)

Teaching

Machine Learning @ Berkeley – VP of Education

Jan '17 - Present

- Led a 15-person team running 2 student classes, workshops, boot camps, and reading groups
- Organized and created content for a new deep learning class of 200+ students; taught regular lectures
- Spearheaded creation of Deep Learning Workshop Series and member education program
- Goal to bring ML education to students: content up for fall17, spring18, fall18, member class, workshops

Project Highlights

Autoregressive Models – Deep Unsupervised Learning Research Project

Jan - May '19

• Studied failure cases of image-based autoregressive generative models

Audio Adversarial Examples - Deep Neural Networks Research Project

Jan - May '18

• Adversarially attacked Mozilla's speech recognition system using genetic algorithms

Take a Picasso – CalHacks 3.0 Project

Oct '16

• Robotic sketch artist; won Best Hardware Hack, Best 3D Printed Hack, and grant from Peter Thiel's 1517 Fund

Papers

Rohan Taori, Achal Dave, Vaishaal Shankar, Nicholas Carlini, Benjamin Recht, Ludwig Schmidt. When Robustness Doesn't Promote Robustness: Synthetic vs. Natural Distribution Shifts on ImageNet. In submission ICLR 2020. link.

Guilin Liu, **Rohan Taori**, Zhiding Yu, Ting-Chung Wang, Edward Liu, Karan Sapra, Fitsum Reda, Brandon Rowlett, Andrew Tao, Bryan Catanzaro. *Real-Time Universal Texture Synthesis using Feature Maps as Transpose Convolution Filters*. In submission CVPR 2020. link.

Rohan Taori, Amog Kamsetty, Brenton Chu, Nikita Vemuri. *Targeted Adversarial Examples for Black Box Audio Systems*. Published at the 2019 IEEE Security and Privacy Workshops. Appeared in NeurIPS 2018 Security in ML Workshop and DEFCON 26 CAAD Village. link.

Murtaza Dalal*, Alexander Li*, **Rohan Taori***. *Autoregressive Models: What Are They Good For?* Appearing in NeurIPS 2019 Information Theory and ML Workshop. link.

Carlo Séquin, Yifat Amir, Ruta Jawale, Hong Jeon, Alex Romano, **Rohan Taori**. *Modular Toroids Constructed from Nonahedra*. Berkeley EECS 2017 Tech Report. link.