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.