Rohan Taori

http://rohantaori.com/ | rohantaori@berkeley.edu | (408) 505-4471 | San Francisco Bay Area

Education

University of California Berkeley, Electrical Engineering and Computer Science   Class of 2020
- GPA: 3.97 – Courses: Machine Learning, Algorithms, Data Structures, Discrete Math & Probability, Intro to EE
- University Award: Regents' & Chancellor's Scholar – top 2% of students in incoming freshman class
- Member of Eta Kappa Nu (IEEE-HKN) honor society – top 25% of students in EECS major

Experience

Head of Education – Machine Learning at Berkeley   Aug 2017 - *Present*
- Leading a 9-person team to run/manage a decal, weekly workshops, new member boot camps, and weekly reading groups
- Creating class content for intro to machine learning algorithms and techniques class to 200+ students (soon to be on EdX)
- Spearheading creation of Deep Learning Workshop Series, including teaching a Deep Reinforcement Learning workshop

Software Engineering Intern – Salesforce   May - Aug 2017
- Worked on the Enterprise API platform, which handles ~60% of all Salesforce data transactions
- Built a tool to integrate and add support for REST framework OpenAPI in with Salesforce's Force.com Apex APIs
- Generated code to automatically handle deserialization and generate Apex server stubs based on the OpenAPI REST spec

Gradient Descent Optimization Research – Prof. Carlo Sequin   Aug - Dec 2016
- Implemented gradient descent algorithm to find optimal solution to near-miss Johnson solid in various configurations
- Formed approach to reduce the solid's 42-dimensional space into 5, then developed cost function for its irregularity
- Published work detailing methodology and explored designs in a paper here

Software Automation Engineer – Dreamable   Jun - Aug 2016
- Created complete UI test suites for each product on the company's platforms: web, iOS, and Android
- Technologies: Rspec, Selenium Webdriver, Capybara, UITest, C#, Ruby, HTML

Software Development Intern, Test Cloud – Xamarin [Now Microsoft]   Jun - Aug 2015
- Developed cross-platform mobile UI test suites, giving performance feedback to Uber, Trello, Pinterest engineers
- Spearheaded the rollout for UI scripting support on Appium's Java framework

Project Highlights

Deep Reinforcement Learning – Partnership with Unity Game Engine   Aug - Dec 2017
- Worked on an ML@B team partnering with Unity to create an agent to play 2-player game Tanks
- Implemented a hierarchical Deep Q Network with experience replay and target networks to create a decent Tank agent
- Experimented with transfer learning for state space representation, and feudal networks using policy gradients

Video Caption Sentiment Analysis – Partnership with Vyrill   Jan - May 2017
- Worked on an ML@B team partnering with Vyrill to implement a video caption sentiment analyzer for product reviews
- Built an end-to-end modular pipeline with steps to pull raw video captions, clean and preprocess, classify, and output
- Created a novel deep architecture including embedding, convolutional, and LSTM recurrent layers
- Increased classification accuracy to ~78%, beating Google's sentiment analyzer in the product review domain

Programming Language Classification – Partnership with GitHub   Aug - Dec 2016
- Worked on an ML@B team partnering with Github to improve their existing programming language classifier
- Wrote a Stratified K-Fold Cross Validation scheme to improve error metrics on SVC and RF classifiers
- Implemented an LSTM 2-layer Recurrent Neural Net to learn better representations of language data
- Reduced classification time by 90% and classification error rate by 40%, presentation at GitHub HQ All-Hands

Take a Picasso – Best Hardware Hack @ CalHacks   Nov 2016
- Built a robotic sketch artist that takes a picture of a user and creates a pencil sketch on canvas
- Used OpenCV to find contours of the user's face and vectorize it into a set of lines for stepper motor to follow

Skills

- Languages & Tools: Python, Java, C#, Numpy, PyTorch, Keras, Tensorflow, Scikit-Learn, AWS
- Interest Areas: deep learning, machine learning, optimization, algorithms and data structures