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: 3.96 – 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

Co-Instructor – Data Science Decal — Aug - *Present*

- Creating and teaching new lecture content of machine learning algorithms and data science techniques to 200+ students

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 - *Present*

- Working on an ML@B team partnering with Unity to create an agent to play reward-based stealth game Shadow Tactics

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

Additional Recognition & Skills

- Best Hardware Hack and Best 3D Printing Hack for the project Take a Picasso – CalHacks
- Perfect score, one of only 67 out of 50,000 students worldwide – Computer Science AP test
- 2nd place in Advanced, out of 60+ teams – Silicon Valley Hewlett-Packard CodeWars
- 2nd place in Advanced and team with most solved problems – Lockheed Martin CodeQuest

- Languages & Tools: Java, Python, C#, Ruby, Tensorflow, Keras, Numpy, Scikit-Learn, AWS
- Areas: machine learning and optimization, algorithms and data structures, REST APIs, software automation