Raymond Yuan

http://raymond-yuan.github.io/personal-site/

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EDUCATION

RICE UNIVERSITY
BS in Computer Science
Expected May 2019 | Houston, TX
GPA: 3.90/4.00
President's Honor Roll (Fall 2015, Spring 2016)

ST. JOHN'S HIGH SCHOOL
Grad. May 2015 | Houston, Texas
Graduated with Cum Laude

LINKS

Github:// raymond-yuan
LinkedIn:// raymond-yuan

COURSEWORK

GRADUATE
Statistical Machine Learning
Introduction to Deep Learning

UNDERGRADUATE
Introduction to Computer Vision
Operating Systems and Concurrent Programming
Reasoning about Algorithms
Advanced Object-Oriented Programming and Design
Fundamentals of Parallel Programming
Computer Systems
Probability and Statistics

ONLINE
Udacity Artificial Intelligence Nanodegree
Coursera Stanford Machine Learning

SKILLS

PROGRAMMING
FLUENT
Python • Java • Wolfram Mathematica
PROFICIENT
Matlab • HTML • C • C#

FRAMEWORKS
FLUENT
Github • Tensorflow • Keras • Android • Unity3D • Arduino

EXPERIENCE

GOOGLE | SOFTWARE ENGINEER
May 2018 - August 2018 | Mountain View, CA
- Developed a series of guides introducing key **tf.keras** and **machine learning** concepts and best practices of each. Addressed a wide array of problems from **classification tasks** to eager **neural style transfer** to **deep reinforcement learning** to **advanced research problems** for different user profiles. Solved these problems in innovative ways that illustrate best practices. Hosted on **TensorFlow Medium** and **tensorflow.org** .
- Identified and fixed usability issues within Keras by developing features or making the user experience more streamlined and understandable.

NEOSENSORY | ALGORITHMS ENGINEER
May 2017 - August 2017 | Palo Alto, CA

- Boosted phoneme classification model accuracy by implementing **audio preprocessing libraries** in Tensorflow with end to end unit testing.
- Worked on developing **high-throughput phoneme classification model for real time inferencing** by implementing quantization, etc. on Android and Cloud.
- Created a deep auto-encoder audio to haptic algorithm for environmental sounds in **Tensorflow** and **Keras** . Had **83%** less reconstruction loss than original algorithm.Create pipeline for real-time inference on **Android** .
- Wrote infant haptic environmental sound algorithm to be featured on National Geographic (to be released in 2018).

PROJECTS

RICE SELF DRIVING CAR | RICE UNIVERSITY
May 2018 | Houston, TX
Created a model to predict steering angle from video input for self driving car. Implemented Vision Stack (3D CNN) + LSTM stacked model with **Keras** and **TensorFlow** . Trained with generalized loss function, custom vision stack, and temporal context.

CLASSIFYING TOXIC COMMENTS | KAGGLE
April 2018 | Houston, TX
Classified Wikipedia comments for six possible types of comment toxicity for a multilabel classification task. Implemented in **Keras** and **TensorFlow** . Classified with **0.9855** ROC AUC loss.

RESEARCH

RESEARCH ASSOCIATE | CORTICALLY-INSPIRED NETWORKS
September 2017 - Present | Houston, TX
Reverse engineer coarse-grained architectural motifs found in biology and neuroscience to solve perceptual tasks such as action recognition from video.

LEADERSHIP AND ACTIVITIES

PRESIDENT | RICE UNIVERSITY CS CLUB
May 2017 - Present | Houston, TX
Design new ways to bring Computer Science students together through their mutual passion for technology.
Manage all communications with companies and outside organizations and coordinate events for them to connect students with technology opportunities.

MISCELLANEOUS | RICE UNIVERSITY
McMurty College **Academic Fellow** , **TA** for Statsical Machine Learning Course (COMP 540), Tracks **Committee Head** for Rice Hackathon