Raymond Yuan

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EDUCATION

RICE UNIVERSITY
BS in Computer Science
Expected May 2019 | Houston, TX
GPA: 3.86/4.00
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
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

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).

NEOSENSORY | APPLICATIONS ENGINEER
May 2016 - January 2017 | Houston, TX

- Presented prototype and design to **Global Fortune 100 company in Japan**.
- Developed algorithms for music "sensationalizer," using **beat detection, adaptive quantization, Fourier transforms of music**.
- Performed scientific experiments to determine best implementation for applications, performed statistical analysis, wrote technical memos, and presented on technical projects.

PROJECTS

IMAGE CLASSIFICATION ON SVHN | RICE UNIVERSITY
May 2017 | Houston, TX
Placed **1st** in in-class Kaggle Competition, with final test accuracy of **98.71%**, using ensemble of **Wide ResNet models**. Also tried Maxout Networks and deep, simple Convolution Neural Nets. Implemented in Keras.

LUNG CANCER DETECTION | KAGGLE - DATA SCIENCE BOWL
April 2017 | Houston, TX
Developed algorithms to improve lung cancer detection by using **candidate generation, 3D CNN, and thresholding**. Implemented using Keras and TensorFlow.

LEADERSHIP AND ACTIVITIES

EXTERNAL VICE 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.

COMMUNICATIONS HEAD | RICE UNIVERSITY HACKRICE7
April 2017 - Present | Houston, TX
Organize and handle all communications with companies, applicants, and organize reimbursement logging.

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.