RAYMOND YUAN

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EDUCATION

Rice University, Houston, TX **GPA: 3.97/4.00** May 2019

Bachelor of Science in Computer Science and Bachelor of Science in Mechanical Engineering

Relevant Coursework: Algorithmic Thinking, Classical Thermodynamics, Engineering Design Studio, Introduction to Computer Science, Fundamentals of Computer Engineering, Engineering Design, Differential Equations and Linear Algebra, Engineering Mechanics: Statics and Dynamics

On President's Honor Roll – Fall 2015

St. John's High School, Houston, TX **GPA: 94.74/ 100** May 2015

Graduated Cum Laude

TECHNICAL SKILLS

- Proficient in: **Python, Wolfram Mathematica**
- Comfortable in: **Matlab, Java, HTML, CSS, Eagle PCB Design**
- Engineering Design Process
- Currently exploring through projects: **SQL, Javascript**

EXPERIENCE

GSI Environmental Engineering Firm June 2015 - July 2015

Paid Internship at GSI Environmental

- Performed Statistical analysis in Excel and Wolfram Mathematica on contaminated and remediated sites to analyze relative performance of different remediation techniques
- Researched, wrote technical memos, and presented on Solarization and Thermal Heat Transfer

Wolfram Mentorship August 2014 – December 2014

Remote Mentorship with Wolfram Research

- Worked with and communicated with mentor remotely, on developing a new function for viewing the sky and the star line from a given location on a different planet at a given time.
- Established new products and functions that may be entered into Wolfram's product stream and Language through remote internship

PROJECTS

Pumani bCPAP Monitoring System - ENGI 120/200 –Engineering Design Studio August 2015 - Present

- Created a functional alarm system add on to the Pumani bCPAP to notify technician when insufficient air pressure is being delivered neonates through bubble frequency detection and interpreter
- Designed and built printed circuit board that utilizes infrared light, band pass filters, and comparator, comprising an analog front end, digital alarm circuit, and a timer circuit, to determine presence of bubbling
- Managed budget, wrote technical memos, presented the project, worked with teammates to communicate and reach final design solution throughout entire design process.

Introduction to Computer Science – COMP140 August 2015 – December 2015

- Developed and created projects that predicted stock market, graph exploration, generate error correction, Markov Chain generators, and prediction using linear models.

Project Lighthouse – *Co-Founder and President* May 2014 – May 2015

- Founded and lead a volunteer tutor program to tutor children, often first generation immigrants to America, who struggle with English and acclimation.
- Managed and organized personal learning programs for each child, working with teammates to teach

Wolfram Demonstrations July 2014

- Researched, presented on, and modeled behavior of equilibrium points in two-dimensional systems of differential equations and the Scuderi Split-Cycle engine; published both demonstrations on Wolfram Demonstrations

LEADERSHIP AND ACTIVITIES

Rice University Cloud 9 Ultimate Frisbee Team, American Society of Mechanical Engineers, Rice Electrical Vehicle Team, Rice Owls Wrestling, Rice Computer Science Club, and Assistant Wrestling Coach at St. John's High School

Shell Ecomarathon at St. John's High School August 2012 –May 2015

Director of Solar Energy and Fabrication

- Lead and dictated actions of construction, research, and installation regarding any solar energy within the car
- Worked with and communicated with sub-teams and entire teams to complete and build the entire car
- Team placed 7th place, and participated at the 2014, 2015 Shell Eco-Marathon competition, respectively