BRANDON GUO

(408) 707-5389 ⋄ brandon49623@gmail.com

EDUCATION

Monta Vista High School *August 2016 - Present*

Weighted GPA: 4.55; Unweighted GPA: 4.00/4; ACT: 36/36 (top 0.1%)
Relevant Coursework: AP Physics 1, 2, C (Mechanics and E/M)
AP Calculus BC, AP Statistics, Linear Algebra
Johns Hopkins Data Science Specialization, Stanford Machine Learning (in progress)
Books I've Read: Emotional Intelligence (Goleman), Quantitative Finance in R (Georgakopoulos), The Sound and the Fury (Faulkner), Focus (Goleman), Machine Learning Yearning (Ng)

PROJECTS

Internship at University of Pittsburgh *July 2018 - September 2018*

Worked in a professional research lab at the University of Pittsburgh Montefiore Hospital under Dr. Yingze Zhang. Performed biostatistics on the accumulated data, using packages in R as well as deep learning models in Python, to draw conclusions from data. Author of peer-reviewed article using neural networks to model risk of positive disease diagnosis.

Research Project at San Jose State University *September 2018 - March 2019*

Worked with Professor Guangliang Chen of San Jose State University in the CS Department on a project related to reducing the dimensions of datasets. Theorized the efficacy of many well-known algorithms. Wrote a paper that combined theoretical and novel practical applications of reduction that won the Computer Science Semifinal Prize at JSHS and was invited to present at JSM 2019.

TECHNICAL STRENGTHS

Development and Analysis	Python, R, Java, Bash, Mathematica
Software	LaTeX, HTML, MS Office, Git

PUBLICATIONS

Generating Predictive Models of Early IPF Detection via Deep Learning: Published 12/18, National High School Journal of Science

Theoretical and Computational Analysis of Novel Dimensionality Reduction Algorithms in Data Mining: Semi-finalist Prize from JSHS, to be published in *JSM Proceedings* in 9/19.

HONORS

United States Physics Olympiad Semifinalist (Top 400); American Mathematics Competition Distinguished Honor Roll (Top 1% Nationally); 3-Time AIME Qualifier (Top 2.5% Nationally); Modeling the Future Challenge Semi-Finalist; SCU Debate Tournament Varsity Octafinalist; Berkeley Model UN Conference: First in the State; Model UN National Qualifier: 2017

ACTIVITIES

President of Silicon Valley Forensics Debate Club, Director of Training of Monta Vista Model UN Team, Director of Operations of Monta Vista Math and Science Club, Percussionist of San Jose Youth Orchestra; Other Interests: Cycling, Reading, Running