nikhil.sardana20@gmail.com

github.com/nikhilsardana

Education Thomas Jefferson High School for Science and Technology

Computer Systems Research, 2014 - 2018

GPA: 4.44

Post-AP Courses: Parallel Computing (C, MPI), Artificial Intelligence (Python),

Multivar Calculus, Math Techniques, Computer Vision (C++)

Experience Communications Engineering Branch, National Institutes of Health

Engineering Intern, June 2017 - August 2017

Project: Classifying Alzheimer's from fMRI Data using Convolutional Networks Inception-ResNet-v2 model diagnoses Alzheimer's and stages of cognitive

impairment more accurately than previous algorithms.

Awards: Regeneron STS Scholar, 2018

Projects Automating Identification of Terrorist Recruitment on Social Media

Worked with friend to create algorithm to identify terrorist propaganda accounts. Used convolutional networks for flag and logo identification and SVMs for account classification. Presented research at Raytheon and NSA.

Awards: Intel International Science and Engineering Fair Finalist, 2017

Siemens Competition Semifinalist, 2016

Team SegFault, MIT Battlecode

Worked in team of 4 in this month-long competition that combines battle strategy, software engineering, and AI. Wrote pathfinding, dodging, and communications algorithms in Java.

Awards: 5th Place | High School Division, 2017

Leadership TJHSST Machine Learning Club

Co-Founder and Captain, 2016 - 2018

Created lectures and presentations to teach other students the theory behind ML. Developed weekly Kaggle InClass competitions to apply material to real-world datasets. Mentored student ML research. Procured sponsorship from Intel, Yext, and TJ Partnership Fund for computational resources.

TJHSST Chemistry Team

Webmaster, 2016 - 2018

Pioneered use of ChemDoodle 3D models to create interactive learning. Lectured on Computational Chemistry.

Awards USA Biology Olympiad Semifinalist, 2015

Top 500 in United States

National Latin Exam Gold Medalist, 2014 - 2016 NJCL Etymology Exam Gold Medalist, 2017 TJHSST Track and Cross Country, 2016 - Present