Roshan Taneja

Aspiring Humanitarian, Software Engineer, Student, and Brother.

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EDUCATION

Sacred Heart Preparatory Atherton [AUG 2021 - PRESENT]

Sophomore: Precalculus BC Honors, Chemistry Honors, AP Computer Science. 3.95/4.0 GPA

Duke University, Residential Summer Program [JULY 2022]

Global Mathematics: Residential program for mathematics and computer science. Built projects centered around graph optimization and search algorithms.

[https://github.com/Daroshi11260/Python-Hill-Cipher-Challenge]

Center for Talented Youth, John Hopkins University [2020, 2023]

Completed Algebra 2/Trigonometry/Data Structures, Algorithms

PROJECTS

Hardware lead at SHP Robotics [AUGUST 2021 - PRESENT]

I am the hardware lead for all robotics teams on campus competing at State and National levels for 2 years and continuing as a team captain in 2023/24. Built 5 robots in 2022/2023 requiring use of CAD, 3D printing, Lathe, laser cutting, that reached Regional Competitions.

Authorship Detection [APR 2023]

Heavily influenced by Word2Vec (developed by Google), produced my own text vectorization software, uses several metrics to vectorize text and compare to celebrity authors and their works. Will be implementing as a python library in the near future

Reinforcement Learning based gaming "Space Invaders" [AUG 2022]

Developed a reinforcement learning-based algo to beat space invaders. Incorporated gym-keras and tensorflow to train slim model on limited moveset. Able to complete the first 2 levels of Space invaders without any points lost.

[https://github.com/Daroshi11260/spaceinvaders-reinforcementlearning]

President, Student Board, Maji Wells - Tanzania Maasai Community [Dec 2020 - PRESENT]

Over the last 2.5 years worked with 6 organizations globally to fundraise \$60,000 and plan, design and deploy multiple water harvesting units for 4500 Maasai tribe members in Losimingori, Tanzania. Motivated and led 5 additional students to join the movement and volunteer to fundraise and conduct on ground work. Invited to speak at the East Africa Lions Club Conference MDCON 23 [Arusha, April' 2023] in recognition for the work.

Water Harvesting Units & Community Center in Tanzania [AUG 2019 - PRESENT]

Painted and prepared the Tanzania community center, conducted 40+ on ground interviews, and completed three projects between Nov 2022-Feb 2023. Results of impact documented and published, including reggnization at Google Arts & Culture and Karimu Working in collaboration with [Project FUEL, Karimu Foundation, Lions Club of Arusha].

WORK EXPERIENCE

Calabazas Cyclery [Aug 2022 - Dec 2022, part-time]

Started as a volunteer and moved to paid employees managing inventory, grew online presence, and drove on-floor sales.. [calabazascyclery.com, usboss.bike]

Building websites for Non-For-Profits

 $Build\ and\ maintain\ websites\ for\ Non-Profit\ organizations\ in\ Tanzania\ and\ local\ artists$

afyayakom.org|voshiphotos.com|artbygeetataneja.com

LEADERSHIP

Class Officer, Spirit Chair [2023-24]

Hardware lead for Robotics at High School [2021-present]

President, Student Board, Maji Wells [2021-present]

Researcher & Volunteer, Project FUEL [2020-present]

Invited speaker, Lions Club MDCON23, Arusha, Tanzania

AWARDS

Rotary Scholastic Award for Excellence in Computer Science [May 2023]

Commended Scholar for the PSAT [October 2022]

Inspire Award at California Regional FTC Robotics

Control Award for California Regional FTC Robotics

9th in Northern California Regional FTC Robotics [Mar 2022]

Ranked 3rd/2nd in National Hackathon [Nov. 2019/2018] TheCoderSchool

SKILLS

Languages: Java, Python, Django, Mojo, Javascript, C++, PHP, DiscordJS, Jupyter, Colab

Softwares: CAD (F360), PrusaSlicer, Vscode, Jetbrains, Fleet

SOCIALS

GitHub: github.com/Daroshi11260 Stck: roshantaneja.stck.me LN: linkedin.com/in/roshan-taneja Email: rytaneja@gmail.com Web: roshan.codes Phone: (650) - 660 - 1901

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