Prayuj Tuli

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EDUCATION

University of Florida

Gainesville, FL

B.S in Computer Science & B.S. in Mathematics; GPA: 3.98/4.00

Aug 2021 - Dec 2024

• Relevant Coursework: Data Structures and Algorithms, Probability, Programming Fundamentals 2, Differential Equations, Discrete Structures, Calculus 3, Statistics 1, Sets and Logic

Land O' Lakes High School

Land O' Lakes, FL

International Baccalaureate Program; Valedictorian - GPA: 4.81/4.00

Aug 2017 - May 2021

EXPERIENCE

FIRST Tech Challenge Team #2845

Tampa, FL

Lead Programmer

Aug 2016 - June 2021

- Volunteered with the Advanced Manufacturing and Robotics Center of Tampa Bay (AMRoC) to introduce modern robotics systems to underprivileged areas near Tampa.
- Used Google's Java TensorFlow API for computer vision, and control loop algorithms to regulate motor power.
- Advanced to FIRST World Championship in 2019.

Wharton Global High School Investment Competition

Land O' Lakes, FL

Team Leader

- Oct 2019 Jan 2021
- Developed portfolio of U.S. and international stocks to invest in for long-term growth.
- Wrote Python algorithm to filter approved stock list based on fundamental analysis. Used NumPy and Pandas libraries for data analysis.

KUMON Lutz, FL

Math/Reading Instructor

Aug 2019 - April 2020

• Worked part-time during the school year helping younger kids become proficient in higher level algebra, and improve their reading comprehension.

PROJECTS

You Owe Me

June 2022 - Aug 2022

• Worked as a group to facilitate paying back debts between multiple people by simplifying a weighted directed graph into a straight line where only zero or one transactions per person is necessary.

Subsonic Streaming

May 2022 - Aug 2022

- Self-hosted a music streaming server for personal use through Subsonic's open-source software
- Integrated with Apple Shortcuts' SSH functionalities to easily use features such as adding new songs, replacing existing songs with different audio sources, and migrating public Spotify playlists.
- Utilized Subsonic's Python API to allow for back-end communication with the music server, Spotify's API to gather song metadata, and other libraries to properly set .mp3 file ID3 tags.

Arch Linux

Aug 2021 - Present

- Configured an Arch Linux environment from scratch to optimize work productivity through custom keyboard macros and efficient window tiling, while creating an aesthetically clean display.
- Wrote several Bash and Python scripts to personalize the environment, including adding facial recognition for PAM authentication, and offline voice recognition to control the device.
- Applied Xorg's C++ libraries to write low-level programs to handle raw input events.

Programming Skills

- Languages: C++, Python, Java, NodeJS, Bash, LaTeX, SQL
- Technologies: Git, Linux, Vim, Emacs, Microsoft Office

AWARDS

- National Merit Finalist: Qualified for the Florida Benacquisto Scholarship.
- University of Florida Dean's List: Herbert Wertheim College of Engineering (2021-2022)
- Microsoft Excel (Office 2019) Certification: Score: 975/1000