Haris Adnan

W001 Craven Quad Duke University

Education

Duke University

Aug 2020 – May 2024

Bachelors of Science in Computer Science and Physics

Durham, North Carolina

3.976

GPA

Relevant Coursework

• Multivariable Calculus

• Data Structures and Algorithms

• Calculus I

• Modern Physics

• Introduction to Computer Systems

• Calculus II

Experience

Duke Computer Science

 ${\bf December~2021-Present}$

 $Teaching\ Assistant$

 $Duke\ University$

- Teaching Assistant for the course 'Intro to Computer Systems' CS210.
- Led weekly discussion sessions covering course material and marked students' exams.
- Held weekly office hours to assist students with projects, code, and concepts taught in class

DevOps, DUU November 2020 – Present

Software Engineer / Member

Duke University

- Completely reconstructed and redesigned the WXDU radio website to show in real time the songs and DJs playing, and automatically put on the songs requested by users. Implemented code to automatically update weekly guest schedule.
- Used firebase and react.js to engineer the DUU website, Duke's top visited website.
- Maintained attendance database for all committees and their weekly meetings to provide to Duke OIT. Tested code using extreme inputs, incorporated data visualization for the DUU year-end report.

Superus Counselling December 2018 – Present

Founder Self-Employed

- Engineered an interactive Superus Website using HTML5. Incorporated dynamic page elements detailing the service provided and videos of satisfied clients. Used databases for all fund distribution and to organise clients' application essays and related documents.
- Managed 31 clients' college applications, counselled high school and undergraduate students. Admissions in 20+ universities: JHU, Cornell, HKU and U of T. Headed team of 5 professional counsellors and 1 tech support team member.

Projects

Archer Assisting Program | Python, Intellij

January 2021 - February 2021

- Engineered Machine Learning object detecting program to assist beginning archers on where to aim based on wind conditions, steadiness, release time, shot distance etc.
- Used projectile motion equations and error propagation to plan out optimal trajectory of arrow.
- Used photo channel filtering to detect arrow and follow actual trajectory in time.

Piezo-shoe March 2018 - February 2021

- Researched optimal piezoelectric power generation for nominal pressured surface area.
- Engineered cost-effective piezoelectric powered shoe under the Duke Student Founder Program. This shoe charges a battery by the user wearing the shoe and walking. This battery can be used to charge a phone under emergency or light up the shoe for fashion.

Percolation | Java, Intellij

March 2021

- Engineered DFS and BFS versions of an analogue of water trickling into and filling up a space of 'open' and 'closed' blocks
- Program visualization using multiple dissimilar patterns of blocks.

Technical Skills

Languages: Python, Java, C, react.js, MATLAB, Assembly(x86-64)

Developer Tools: VS Code, Scheme, Intellij, Jupyter Notebook, LaTex, Arduino

Technologies/Frameworks: GitHub, GitLab, Microsoft Office