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Github

HAMZA ASAAD

EDUCATION

Forman Christian College (A Chartered University)   **Lahore, Punjab, Pakistan**
- **Major**: Computer Science   **B.A. Expected June 2023**
- **Relevant Coursework**: Data Structures, Design & Analysis of Algorithms, Operating Systems, Software Engineering, Database Systems, Numerical Computing, Linear Algebra, Discrete Mathematics, Computer Organization, Introduction to Computer Science, Calculus I, Web Programming with Python and JavaScript
- **Cumulative GPA**: 3.965/4.00
- **Awards and Honors**: Vice Rector List (GPA above 3.7) for 4 consecutive semesters

EXPERIENCE

Co-founder and Lead Software Engineer, *RŌZ*   **Oct. 2021 – Present**
- Redefining healthcare and empowering users with control of their health via early breast cancer detection hardware and software powered with machine learning models
- Developing a full stack web and a mobile application from the ground up that can receive stream data from our thermal scanning hardware
- Integrating and implementing modern development, authentication, and cryptography techniques
- Leveraging extensive database and input validation of data models represented via Mongoose and MongoDB to securely store user information including thermal scans, location, and medical history
- Using Azure and its services such as Azure Virtual Machine to host our model send and receive data and using Azure deployment services such as Azure Mobile App Services

Freelance Software Engineer, *BloxStaking, SSV.Network, WeTradeDaily*   **Nov. 2021 – Present**
- Development, deployment, and maintenance of a GoerliETH Faucet with built in automated verification and tracking of user limits with a volatile Redis based cache employing etherscan API and web3

Operation and Supervision of Laser Cutting Machines, *Intersteel Wrought Iron*   **Jun. 2019 – Aug. 2019**
- Lead Trained to operate maintain and supervise industrial laser cutting machines
- Disseminated the training to further employees supervising their progress and skill

PROJECTS Available to view on Github

Open-Source Custom BEP20 Token Bot.   **Apr. 2020**
- Implementation of a custom BEP20 token deployed on the Binance Smart Chain using truffle and automated using a combination of the discord API and web3

Data Model to Calculate Perceptions Surrounding Online Learning.   **Apr. 2021**
- Participation and selection as top 5 data models in Stanford Open Datathon 2021
- Studied the connection between the sudden shift in modality of education and its influence on the future viability of online education in the eyes of the Pakistan academic space
- Leveraged twitter API to scrape through tweets to use as an indicator for perceptions
- Used a survey to gather further data as a second indicator
- Both indicators were combined to create a data model
- Gauged perceptions to weigh in on the future of online learning in a post pandemic Pakistan

CS50 Projects on Django/SQL/JavaScript.   **May. 2021**
- Full mock backend development of Wikipedia-like site using Django
- Usage of JavaScript, HTML and CSS to create a single page app email client

AWARDS & ACHIEVEMENTS

Microsoft Imagine Cup 2022 Epic Challenge Winner.   **Dec. 2021**
- EMEA region winners as ROZ development team for our proposal of AI assisted breast cancer detection app.

Stanford Open Datathon Top 5 data model.   **Apr. 2021**
- Project 'The Future of Online Learning in a Post Pandemic Pakistan' chosen as top data models

SKILLS

- **Technical Skills**: Java, Python JavaScript (Strongest), MongoDB, Postgres, React, Express.js, Blockchain, Solidity, Truffle, Web3, Machine Learning, R, SwiftUI, Django, HTML, CSS (familiar)
- **Spoken Languages**: English, Urdu, Hindi, Punjabi (fluent), German (basic)
- **Interests**: Hiking, Writing, Gaming, Filmmaking