Ayaz Hafiz

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github.com/ayazhafiz

EDUCATION

Vanderbilt University – School of Engineering – May 2021

- BS candidate, Computer Science and Chemistry
- Cornelius Vanderbilt full-tuition scholarship (4 years)

Plano West Senior High School – May 2017

- 4.0/4.0, Rank 21/1400

WORK EXPERIENCE

Research Assistant, Frank Tong Lab (Vanderbilt University) – December 2017 – Present

- Built effective convolutional and recurrent neural networks to classify objects in images
- Used deep learning models to better hypothesize methods of human vision and object analysis
- Extensive use of TensorFlow, Keras, Python, and MatLab

Full Stack Developer, meetHere — November 2016 – August 2017

- Developed a full stack for a start-up using Crystal, Kemal, Node, and PostgreSQL
- Designed user interfaces and implemented components using React, TypeScript, and Vivus.js
- Placed as the US representative for the global Startup Open entrepreneurship competition

LEADERSHIP

Membership and Recruitment Board, VINES — August 2017 – Present

- Responsible for managing and tracking member growth in Vanderbilt's entrepreneurship club
- Created a website and blog for the organization, and tracked attendance using Excel

President of Membership, National Honors Society — August 2016 – June 2017

- Kept track of over 1000 members and their volunteer hours using PostgreSQL and Excel
- Designed an online portal for members to track their meeting attendance and volunteer hours
- Helped organize a fun-run that donated $5000 to local libraries

SELECTED PROJECTS

meetHere.js — July 2017 - Present

- Open-sourced core algorithms used by the meetHere web applications in JavaScript/TypeScript
- Improved low-level operations with C++ bindings and a variety of heuristic algorithms
- Incorporated deep integration with Google Maps APIs for real-time applications

Cliq with Me — October 2017 – Present

- Created a social media aggregation tool for student to connect with others at university events
- Developed a web application using Flask, Node.js, Passport, PostgreSQL, and Material Design

Crystal Shards — Spring 2016 – July 2017

- Wrote a variety of packages, including a vector and mobile library, in Crystal
- Published repositories as "shards" available to use by the Crystal community
- Contributed to community shards and frameworks like Kemal on GitHub

COIT — Spring 2016

- Created an app to deterministically estimate the optimal parking spot in a large garage
- Developed a regression model in R with 90% accuracy
- Wrote a progressive web app using Vue.js and Materialize

SKILLS

Languages: Java, Javascript/Typescript, Crystal, C++, R, SQL, Python, HTML/CSS/Sass, Bash/Zsh

Technologies: Node.js, TensorFlow, Express, Kemal, Shiny, React, Vue.js, PostgreSQL, Docker, Git