Zi Huang
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EDUCATION

Virginia Tech **August 2019 – December 2023**

- Major: Computer Science
- Major: Statistics
- General GPA: 3.54/4.0

SKILLS

Language: Fluent use of Mandarin and English (speaking, listening, writing and reading)

Computer: Proficient in Java, Python, C, R, JavaScript, MATLAB

ACADEMIC EXPERIENCE

Speech Segmentation, Wind, Virtual, Shanghai, China **September 2022 - Now**

- Became a research scientist to study several approaches of text segmentation, including Block Design, Vocabulary Introduction, Greedy Segmentation, and Dynamic Programming
- Applied the techniques I learned in NLP and Machine Learning into a real scenario that interprets Chinese into English orally

Arduino Camp, **Blacksburg, VA** **July 2022 – August 2022**

- Sponsored by National Science Foundation (NSF)
- Tutored students that are African Americans and women how to use the basic components in Arduino package, including Analog Reference pin, Digital Ground, Digital Pins, etc.
- created a website that takes some photos to present the contribution both I and my teammates did and describe how the activity associated with Arduino performs.
- Website: https://litinghu.github.io/Outreach/

Quantum Outreach, Blacksburg, VA **May 2022 – July 2022**

- Assigned a group of PhD students to learn the styles, strategies and techniques of teaching senior high school students.
- Tutored the students and people in different educational background, from senior high schools to professors in Russia and Spain, to help them resolve questions about Quantum Information and Processing such as superposition and entanglement without Linear Algebra
- Achieved the basic knowledge regarding Quantum Information and Processing to further enhance my research skills toward Quantum Computation

Volunteer, HackDuke, Durham, NC **November 2019 – December 2019**

- **Project Topic:** *Source of Income and Charitable Giving*
- Described the formation of the navigating system coded in JavaScript, HTML, and CSS, including the user's current location, their friends' locations, and its corresponding connection

PROJECTS

Earthquake Prediction [Python] **April 2022 – May 2022**

- Used data from Kaggle about the information regarding the longitude, latitude, magnitude, location, and the population density of the occurrence of the earthquake to be able to predict when and where the next earthquake will take place
- Took advantage of approaches from Machine Learning and visualization techniques in Python Libraries, including K-means Clustering, GeoPandas, and so on and so forth, all of which lay a solid foundation in helping me deeply comprehend a variety of machine learning algorithms and methods

E-Flow [HTML, CSS, JavaScript, Python] **February 2022 – March 2022**

- Simulated the environment among the manufacturer, the deliverer, and the receiver to address issues regarding the procedures over processing the product
- Evaluated the quality of the product by scanning the QR code via mobile phones By Python
- Began to become a front-end developer to create a website used to maintain the connection between the customer and the receiver, the customer and the manufacturer, and the receiver and the manufacturer

COVID19 Visualization [JAVA] **October 2020 – December 2020**

- Inspected the current situation of people who were already diagnosed with COVID19 for each race in each state by incorporating the main data structure named doubly linked list with some implementation techniques and parameters that describe the characteristics of a person, including its race, age, and height
- Calculated the percentage of people in each state tested positive on Covid, made a hypothesis based upon the phenomenon observed, and formulated an overall trend used to conclude which races are more likely to get COVID19

Air Drone Testing [MATLAB] **March 2020 – May 2020**

- Adapted Computer Science, Computer Engineering, and Mechanical Engineering to analyze the components of air drone and keep track of the physical properties of the air drone such as velocity, height, and its respective tilted angle at different directions
- Examined our performance of air drone by experimenting the air drone reasonably and conducting an elaborate diagnostic report.