Kelan Wu

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EDUCATION

University of Houston, College of Natural Science and Mathematics

December 2024

Bachelor of Science in Computer Science

• Cumulative GPA: 3.54/4.00

• Scholarships and Awards: Dean's List 2020-Present

EXPERIENCE

HULA Group, University of Houston

Houston, TX

February 2023- Present

Undergraduate Researcher

• Designing an innovative AI-based therapeutic solution to facilitate behavioral therapy for unvierstiy students, with a focus on providing personalized support to enhance their mental well-being.

- Employing React Native to architect and construct a dynamic mobile application with versatile features.
- Leveraging GPT-3 and utilizing advanced techniques in ML/AI to unlock language understanding and manipulation.
- Advised by Dr. Hien V. Nguyen of the electrical & computer engineering department, at the college of engineering.

Houston Methodist Houston, TX

Undergraduate Researcher

February 2023-Present

- Advised by Dr. Prashant Dogra.
- Applied mathematical & machine learning models to medical applications.

PREPRINTS

Awasthi, A., Rizvi, S. A., Nizam, J., Wu, K. "Regional analysis of ESM models using Bias Corrected spatial disaggregated superresolution convolutional neural networks". EarthArXiv preprint (2021).

PROJECTS

Stat Padder - The Ultimate NBA Statistics Application

Houston, TX

Personal Project (GitHub)

October 2022 - Present

- Developed a full-stack web app in Python, HTML/CSS, & JavaScript by integrating interactions between the front and back-end.
- Utilized Flask & NBA API to dynamically extract and display information to the front-end based on the user's command/request.
- Express data and statistics in a unique and visually pleasing way by leveraging Chart.js and other JavaScript libraries.
- Designed a responsive user experience for a wide range of devices by implementing CSS Framework, Bootstrap 5.

Resource Visualization

Houston, TX

October 2022

CodeRed Odyssey Hackathon (Conoco Philips Challenge) (GitHub) (DevPost)

- Participated in a highly competitive hackathon of 200 participants, intensively coding and developing solutions for a full 24 hours.
- Engineered a powerful data analytics web application tool for petroleum industry professionals, capable of providing oil and gas information from all 50 states in the U.S., by utilizing U.S. Energy Information Administration open data resource.
- Effectively organized and cleaned many datasets containing complex oil and gas information by using Python to ensure accuracy.

INVOLVEMENT

Code Coogs Team O(n) Member Houston, TX

August 2022 - Present Enrolled to acquire experience in collaborating with a diverse collective to achieve a common goal.

- Collaborated with a team of 20 to develop a complex 2D cooking-based game by developing with Unity.
- Responsible for designing artwork and producing audio assets for various in-game scenarios and situations by using Adobe Photoshop/Illustrator and FL Studio.

CougarCS Organization Web Dev Committee Member

Houston, TX

• Distinguished as one of the four individuals out of a highly competitive pool of candidates for this position.

August 2022 - Present

- Enhanced web development expertise through contributions to numerous web development initiatives within this organization.
- Elevated programming aptitude through engagement in numerous events, including the CodeRed Hackathon.

SKILLS & INTERESTS

Technologies: Python, JavaScript, C++, R, HTML/CSS, Jupyter Notebook, Git, Microsoft Office (Word, Excel, PowerPoint), WireShark

Skills: Machine Learning, Data Science

Interests: Professional Sports (NBA, Soccer, & Swimming), Music, Piano