Lukar Huang

Boston, MA | Phone: (857) 248-7123 | Email: lwhuang@alumni.cmu.edu | GitHub: github.com/lukarh

EDUCATION

CARNEGIE MELLON UNIVERSITY   **Pittsburgh, PA**
Bachelor of Science in Physics   August 2018 - May 2022

WORK EXPERIENCE

Spatial Front, Inc.   **Remote**
Front End & React Developer   Oct 2023 – Present
- Built user interface components from **UI/UX mockups** for the **Grazingland Resources Analysis System (GRAS), a GIS application** for the Natural Resources Conservation Service at USDA using **React, TypeScript, ApexCharts,** and more
- Advanced the development of existing modules such as Forage Inventory and Animal Inventory, which allows farmers to estimate forage production for their land and manage forage animal balance and herd demand for their animal groups
- Connected GRAS to **APIs built by Colorado State University** to provide plant growth curve and forage data using **TypeScript** and the **MobX state management library**
- Maintained **unit test coverage** at a **80% benchmark** during sprints and releases with **Jest.js** and the **React Testing Library**
- Spearheaded the front-end development in collaboration with the team's GIS developer for the Forage Adjustment Areas module in Forage Inventory that allows farmers and GRAS users to identify water sources and areas of impacted forage production through the management of geospatial and attribute data of Forage Adjustment polygons and water points

RSK Analytics   **Remote**
Data Scientist Intern   Jun 2022 – Nov 2022
- Engineered a pipeline to gather data from online sources to create **Tableau** and **Google Sheets Dashboards** to analyze NBA/NFL players by developing web-scrapers with **Selenium** and **Python** and integrating **Sports Info Solutions' API**
- Applied **K-Means clustering** and **regression techniques** to project fantasy points and create 8+ player archetype models

Carnegie Mellon Stats & Data Science Department / Enrollment Services   **Pittsburgh, PA**
Undergraduate Teaching Assistant / Enrollment Services Student Ambassador   Oct 2019 - May 2020, Sep 2021 – May 2022
- Assisted the professor's Engineering Statistics & Quality Control course with office hours and grading through Gradescope
- Contributed to departmental projects, such as updating the HTML of the University's website and researching general info

City of Boston - Department of Youth Engagement & Employment   **Boston, MA**
Youth Coordinator Employment Intern   May 2019 - Aug 2019, July 2020 – Aug 2021
- Promoted from **Lead Intern to Coordinator Intern in 2020** and lead a team of two to **3 successful employment seasons**
- Spearheaded the transformation of an outdated manual time entry process by assisting the development of a **Time Entry Program in Python,** resulting in **50% reduction in time spent** inputting time and improved data accuracy
- Audited hiring and payroll processes for 3000+ youths through data entry, cross-verification, and document verification

PROJECTS

Vibeify Web-Application   July 2023
- Developed Vibeify, a full-stack web application, using **MERN stack**, **JavaScript**, and integrating **Spotify's Web API**
- Implemented login and logout user authorization utilizing Spotify's **OAuth**, enabling seamless integration of users' Spotify profiles for a **live web-application deployed on Heroku** and using **access tokens** to retrieve users' Spotify data
- Designed a user-friendly front-end design using **Material-UI components** and custom **CSS (Cascading Style Sheets)**
- Optimized data fetching for API-driven components, including **NivoCharts**, by employing **React Query**

Tracking Assists Dashboard   Feb 2021 - Mar 2021, June 2023
- Engineered a player profile report dashboard using **Python, Dash Framework,** and **Bootstrap Components**
- Integrated **Plotly graphs** to create visually appealing & interactive charts, facilitating real-time exploration of spatial basketball data, utilizing **PostgreSQL** and **SQLAlchemy** as the backend database to efficiently retrieve data through queries
- Refactored a monolithic codebase comprising a single 2500 line .py file into a modularized & industry-standard format
- **Deployed the app on Heroku**, recognized by Plotly's Sr. Director as one of the **Top 500 Real World Analytics Plotly & Dash Web-Apps** and presented the project to former Bucks' Analytics Manager Ashley Brio, receiving positive feedback

SKILLS

Technical Skills: TypeScript, JavaScript, Python, CSS, HTML, React.js, Node.js, Jest.js, Plotly, Dash, SQL
Developer Tools: GitHub, Bitbucket, Jupyter, VS Code, Heroku