Chuhan Xu

(+1) 412-626-0648 | ✉ xuchuhan777@gmail.com | in chuhan-xu-b68415191

Objective

Seeking for Full-time Software Engineer Position

Work Experience

Bioinformatics Department, University of Pittsburgh   *Jan. 2020 - Present*

Systems Programmer II

- Implemented different machine learning algorithms including neural network to improve the test AUC of binary classification in prediction of recurrence and metastasis of breast cancer
- Optimized neural network layer structure of deep learning models according to results from thousands of grid search experiments using scikit-learn to improve final test AUC by 5%
- Analyzed the relationships between different parameter combinations of deep learning model and final test AUC results
- Achieved a breast cancer chat robot that can provide the probability of recurrence according to the best model researched by having normal conversations with patients using Python Flask

Information Technology Department, Squirrel AI Adaptation Education   *Jun. 2019 - Aug. 2019*

Information Technology Intern

- Designed and optimized a quiz system by adding more personalized prompts and face recognition to improve user experience
- Cooperated with backend software engineer seamlessly to finish students self-checking score system and progress analysis report
- Updated and created related course resources on the main page according to requirements of users and internal employees

Big Data Analysis Laboratory   *Sep. 2017 - May. 2018*

Research Assistant

- Researched on Female Entrepreneurial Mode at the Internet Era--Based on the Web Celebrity
- Designed questionnaire for detailed information of web celebrities and distributed it online and offline
- Developed a crawler to acquire raw data such as followers' number and daily comments from different marketing platforms
- Published research on the Journal of Hubei University of Economics (Humanities and Social Science)

Project Experience

Skiing Tickets Cooperation Platform *Core Member*   *Feb. 2021 - Feb. 2021*

Introduction: A website system to help skiers purchase tickets at much lower prices in a group format

- Completed the front end of SKIJoin using hook function **useState** to improve code efficiency
- Achieved Search Page, Discussion Page, Profile Page to satisfy user's requirements using **React-Router-Dom**
- Implemented **Material-UI** and **Bootstrap** to create an awesome user interface for the main page and search page
- Deployed our project SKIJoin with **Firebase Hosting** and accomplished log in part with **Firebase Authorization Roles**

Yelp Restaurant Reviews Retrieval *Team Leader*   *Oct. 2020 - Dec. 2020*

Introduction: A yelp review key-word information retrieval system for restaurants in Pittsburgh

- Extracted and formatted more than 5000 reviews in Yelp using python web crawler **Beautiful Soup**
- Ranked top 10 related restaurants using **Statistics Language Model** and **Pseudo Relevance Feedback**
- Designed and implemented the UI interface including the main search page and restaurant instruction page using **Spring Boot**

Skills

- **Languages**: Python, Java, JavaScript, HTML, CSS
- **Environment and Framework**: Flask, Django, TensorFlow, Keras, Node.js, React.js
- **Systems and Tools**: Linux, Windows, Github, AWS, MySQL, MongoDB, PostgreSQL

Educations

University of Pittsburgh   *Aug. 2019 – Present*

M.S. Information Science (3.788/4.0)

Database, Web Technologies, Information Retrieve, Cloud Computing, Machine Learning, Human Interaction Design

Awards

- Rewarded with **National Second Prize** in China Undergraduate Mathematical Contest in Modeling
- **First Prize in General Category** of 2021 SteelHacks Website Design Contest