

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

# **Summary** \_

I was graduated in 2021 and currently work as a Software Engineer in Bioinformatics Department at University of Pittsburgh. There is a lot of data behind every event in the world, I am committed and enthusiastic in making these data tell their own stories by reasonable data analysis. Driven by great challenges and learning opportunities, I look forward to combining Data Work with Interactive Web Development to make data analysis easier and interesting in daily life.

# **Work Experience**

#### **Bioinformatics Department, University of Pittsburgh**

Pittsburah

SOFTWARE ENGINEER

Dec. 2020 - PRESENT

- Simplified data analysis process and reduced the plotting time to 2/3 of the original time by designing interactive data visualization tool DataCharts using Flask and plotly
- Improved user experience by adding voice functions with pyttsx3 to iMedbot which is designed to compute breast cancer recurrence probability according to users' inputs
- · Achieved an increase of AUC from 75% to 84% in terms of prediction of breast cancer recurrence by implementing Grid search strategy to find the best combination of hyper parameters with Keras

### **IT Department, Squirrel AI Adaptation Education**

Xiangyang

INFORMATION TECHNOLOGY INTERN

Jun. 2019 - Aug. 2019

- · Complimented by the department leader because of the outstanding cooperation with the back-end software engineer to finish students self-checking score system and progress analysis report using PostgreSQL
- · Updated and created related course resources on the main page according to requirements from users and internal employees

## Big Data Analysis Lab, Hubei University of Economics

Wuhan

RESEARCH ASSISTANT

Sep 2017 - May 2019

- Published paper "Female Entrepreneurial Mode at the Internet Era-Based on the Web Celebrity" on the Journal of Hubei University of Economics (Humanities and Social Science)
- Developed a crawler to acquire raw data such as followers' number and daily comments from different marketing platforms

# **Proiects**

#### **Skiing Tickets Cooperation Platform (SKIJoin)**

Pittsburah

INSTRUCTION: A WEBSITE SYSTEM TO HELP SKIERS PURCHASE TICKETS WITH MUCH LOWER PRICES IN A GROUP FORMAT

Feb. 2021

- Enhanced code reusability at least 10% by using hook function useState to complete the front-end interfaces of SKIJoin
- Realized transitions between different pages including Search Page, Discussion Page, Profile Page using React-Router-Dom
- Implemented Material-UI and Bootstrap to create an awesome user interface of the main page and search page

#### Yelp Restaurant Reviews Retrieval (TopYeview)

Pittsburgh

INSTRUCTION: A YELP REVIEW KEY-WORD INFORMATION RETRIEVAL SYSTEM FOR RESTAURANTS IN PITTSBURGH

Dec. 2020

- 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 front-end interfaces including the main search page and the restaurant instruction page using Spring Boot

## **Skills**

**Programming Languages** Python, JavaScript, R, Java, GO, HTML, CSS, Latex

**Environments and Frameworks** Flask, Django, React.js, Node.js, Tensorflow, Keras, AWS

Tools and Databases Git, Docker, MySQL, MongoDB, PostgreSQL

## **Education**

### **University of Pittsburgh**

Pittsburgh, PA

M.S. IN INFORMATION SCIENCE 3.8/4.0

Aug. 2019 - Apr. 2021

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

### Honors & Awards

First Prize in General Category, SteelHacks Website Design Contest 2021

Pittsburgh, USA

2016 National Second Prize, China Undergraduate Mathematical Contest in Modeling Wuhan, CHN

CHUHAN XU · RÉSUMÉ SEPTEMBER 16, 2021