

# Chuhan Xu

☎ (+1) 412-626-0648 | ✉ xuchuhan777@gmail.com | 🌐 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 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 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