# Chelsea (Aiqi) Cui

acui@andrew.cmu.edu | (814) 882-9127 | www.linkedin.com/in/aiqicui/

### **EDUCATION**

Carnegie Mellon University (GPA: 3.76/4.0), Pittsburgh, PA

May 2020

Bachelor of Science in Information Systems, Additional Major in Statistics & Machine Learning

**Selected Coursework**: Web Application Design and Development, Web Application Security, Database Design and Development, Machine Learning (master level), Practical Data Science, Data Mining, Data Visualization

#### **SKILLS**

**Software Development:** Python, Ruby on Rails, JavaScript, React, HTML, CSS, Ajax, Flutter, TypeScript, Git, Linux, C **Data Analytics:** SQL, R, Scikit-Learn, Hadoop, MapReduce, Pig, Tableau, Excel Pivot Table

#### **EXPERIENCE**

Handshake | Software Engineering Intern

May 2019 - August 2019

- Used Elasticsearch to enhance job role search performance and increased conversion rate by 262% in 7 days
- Initiated company-wide web accessibility discussion on the platform user interface leading to 10+ major changes
- Conducted A/B tests on search relevance and emails with React and Ruby on Rails to improve application rate

## **CMU School of Computer Science, HCII** | Research Assistant

November 2018 – May 2019

- Project 1: Interactive Dichotomous Web Key
  - o Built an interactive dichotomous key for macroinvertebrate identification using JavaScript and HTML
  - o Collaborated with scientists and designers on interaction design iterations to improve user experience
  - o Performed multiple rounds of interviews with real-world users to test usability and collect feedback
- Project 2: Learning Pattern Data Mining with Website User Log
  - o Engineered a data mining algorithm to analyze user log data through pattern recognition and clustering
  - o Leveraged Python and Javascript to investigate and present learning pattern differences between novice and professional users
- Project 3: Mobile App for macroinvertebrates.org
  - o Designed and implemented a cross-platform offline-first mobile application with React Native (v1.0) and Flutter (v2.0) to allow users to easily identify macroinvertebrates in outdoor environments.
  - o Re-designed and developed the project site's database to satisfy mobile needs and saved 5GB+ memory

#### Microsoft | Software Engineering Intern

May 2018 – August 2018

- Created a ML filter with Python (Scikit-Learn) to raise chatbot's chitchat response accuracy from 70% to 96%
- Built and organized a bilingual knowledge base with 3000+ utterance data to support 95% business FAQs
- Analyzed weekly user responses via Excel Pivot Table and Tableau to assess the efficiency of each project sprint and major functional changes

#### RECENT PROJECTS

# Junior Technology Consulting Project, CMU.

May 2019

- Served as the quality assurance lead and main developer of the project; Leveraged agile development life cycle
- Led the architecture design of the website to make sure it is sustainable and mobile-friendly
- Utilized Google Script API and PHP to build the site's backend to support non-technical admin's daily operation

## **Predicting House Prices with Machine Learning**, CMU.

May 2018

- Developed a machine learning model with Python to predict house prices in Ames, Iowa
- Applied statistic analytical skills for data cleansing and feature engineering
- Placed in top 15% on the worldwide leaderboard for the final result

## E-commerce Web Scraper, CMU.

March 2018

- Created a web scraper with Python (BeautifulSoup) to collect all Samsung phone sales information on a website
- Self-learned and implemented web driver with Selenium to trigger and collect JavaScript hidden information