# Andy (Xiangyu) Cui

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F1-OPT | Sponsor Needed | (402)-853-3000

#### **EDUCATION**

Northeastern University
M.S. in Artificial Intelligence of Khoury College
University of Nebraska-Lincoln
B.S. in Computer Science of Arts Science College

Dalian Neusoft University of Information

B.S. in Electronic Information Engineering

Boston, MA, USA Sept. 2021-Dec.2023 Lincoln, NE, USA Sept. 2016-May. 2020 Dalian, LN, CHN Sept. 2013-Sept. 2015

#### **SKILLS**

• Programing languages: Java, Python, JavaScript, HTML, CSS, C/C++, Assembly, VB

- Database: MySQL, PostgreSQL, MongoDB, Redis, SQLite, Hive
- Machine Learning: TF-IDF, Naïve Bayes, GPT-2, Bert, CNN, Transformer
- Framework/Libraries: Spring Boot, React.js, Node.js, jQuery
- Version Control & CI/CD: GitHub, TFS, Azure DevOps, Jenkins, Jira
- Others: AWS, Docker, Maven, Tomcat, Axure, Servlet, Junit, Nginx, LaTeX, CAD design, Tableau

#### **WORK EXPERENCE**

# AlpaLifeBio Inc | Internship

Software Engineer

Woburn, MA, USA Dec. 2022- June 2023

- Executed data collection from biomedical public databases through **Python** and graphical **web scraping tools**, enhancing the dataset for advanced analysis.
- Applied NLP techniques for data comparison and matching, effectively identifying potential clients and contributing to targeted marketing strategies.
- Processed and analyzed over 50,000 data entries daily, utilizing graphical data representations to streamline reporting and significantly boost workflow efficiency.
- Consolidated existing datasets for integrated analysis and established a structured **SQL** database, implementing tag processing for improved search and retrieval operations.

### PROJECT EXPERIENCE

## Amazon QA robot trained by BERT & GPT-2 (NLP)

Team Leader & Development Designer

Boston, MA, USA

Sept. 2023-Dev. 2023

- Developed a Question Answering (QA) system using **GPT-2** and **BERT** models focused on Amazon product reviews, assessing their performance in natural language processing tasks.
- Applied advanced NLP techniques, including TF-IDF Vectorization, CBOW, and Skip-gram, for effective data preprocessing and analysis.
- Performed comprehensive model training and fine-tuning with a Kaggle dataset, utilizing accuracy, <u>LOSS</u>, and <u>BLEU</u> score metrics for evaluation.
- Conducted K-Fold Cross-Validation and ablation studies to optimize model performance and robustness.

## **Employment Website Design by Axure (HCI)**

Boston, MA, USA

Development Designer

Sept. 2023-Dev. 2023

- Orchestrated the design of an Employment Website tailored for co-op opportunities, meticulously realized through the principles of **Human-Computer Interaction** (HCI) and ensuring an intuitive user experience that aligns with non-technical user habits for widespread acceptance.
- Applied **CRAP design** principles to create a visually cohesive and navigable interface, addressing existing website pain points by incorporating critical features such as visa type and field of work.
- Championed a cohesive UI design philosophy across the platform, securing a seamless and inclusive user experience that appeals to a diverse audience. The design's efficacy and user satisfaction were substantiated through extensive usability testing, confirming that the interface meets high standards of effectiveness and user gratification.

## Robot Shop Database (SQL)

Boston, MA, USA

Team Leader & Development Designer

Jan. 2023-May. 2023

- Developed a <u>Python</u> and <u>MySQL</u>-based Robot Store Management System to streamline operations for small supermarkets, featured in a terminal user interface.
- Implemented SQL database structures and <u>Python-MySQL</u> connections, enabling efficient user account, order, and refund management.
- Constructed and documented a secure, offline management system, accommodating customer and operator interactions with potential for web expansion using **Diango**.
- Managed project version control with Anaconda and maintained code repository on <u>GitHub</u>, with comprehensive enduser documentation and test cases.