

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

Boston, MA, USA

Sept. 2021-Dec.2023

University of Nebraska-Lincoln

B.S. in Computer Science of Arts Science College

Lincoln, NE, USA

Sept. 2016-May. 2020

Dalian Neusoft University of Information

B.S. in Electronic Information Engineering

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 EXPERIENCE

AlpaLifeBio Inc | Internship

Software Engineer

Woburn, MA, USA

Dec. 2022- June 2023

- Executed data collection from biomedical public databases using **Python** and **graphical web scraping tools**, enhancing the dataset for advanced analysis. Additionally, processed and analyzed over 500,000 data entries daily, utilizing graphical data representations to streamline reporting and significantly boost workflow efficiency.
- Applied **TF-IDF** techniques for data comparison and matching, effectively identifying potential clients with a match rate of up to 95%, significantly contributing to targeted marketing strategies.
- Consolidated existing datasets for integrated analysis and established a structured **SQL** database, implementing tag processing for improved search and retrieval operations. This approach has saved 80% of the time for future data searches and significantly enhanced work efficiency, thereby saving costs for the company.

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.
- Conducted **K-Fold** Cross-Validation and ablation studies to optimize model performance and robustness, utilizing comprehensive model training and fine-tuning with a Kaggle dataset. We focused on accuracy, **LOSS**, and **BLEU** score metrics for evaluation, ultimately achieving high precision with an Accuracy F1 score of up to 94%.

Employment Website Design by Axure (HCI)

Development Designer

Boston, MA, USA

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)

Team Leader & Development Designer

Boston, MA, USA

Jan. 2023-May. 2023

- Developed a **Python** and **MySQL**-based Robot Store Management System to streamline operations for small supermarkets, featured in a terminal user interface.
- Implemented SQL database structures and **Python-MySQL** 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 **Django**.
- Managed project version control with Anaconda and maintained code repository on **GitHub**, with comprehensive end-user documentation and test cases.