

# Andy (Xiangyu) Cui

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Looking For SDE/AI/ML/DS Graduated 2023 December | Start work January 2024 | (402)-853-3000

## EDUCATION

### Northeastern University (NEU)

*M.S. in Artificial Intelligence of Khoury College*

Boston, MA, USA | Sept. 2021-Dec.2023

### University of Nebraska-Lincoln (UNL)

*B.S. in Computer Science of Arts Science College*

Lincoln, NE, USA | Sept. 2016-May. 2020

### Dalian Neusoft University of Information (DNU)

*B.S. in Electronic Information Engineering*

Dalian, LN, CHN | Sept. 2013-Sept. 2015

## AWARDS

- 1st Prize in Computer Business Entrepreneurship Contest.
- 7th Place in ICPC ACM 2017 Central American Finals.
- Winner of 2015 Freescale Smart Car Competition.

## SKILLS

- Languages: Mandarin (native), English (fluent)
- Computer Expertise: Java, Python, C/C++, SQL, Linux, C#, Django

## FEATURE

- Passionate about sports, particularly running and fitness. Excel in fostering strong team relationships and ensuring efficient task completion. Demonstrate robust resilience under pressure and effectively handle challenging assignments in the workplace.

## INTERSHIP

Nanobodies CRO Service | AlpaLifeBio Inc

Woburn, MA, USA | Dec. 2022- June 2023

*Software Engineering*

- Use Web Scraper tool and **PyQuery**, **Scrapy** to collect the data and classification.
- Use Python to do sequence mining and quantitative analysis nanobody data and compare our data with competitor.
- Collect all data and build the develop the local database use **SQL** and write **PROCEDURE** to implement.
- Analyze millions of data and use **CNN** to predict potential customers for the product.

## PROJECT EXPERIENCE

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

Boston, MA, USA | Sept. 2023-Dev. 2023

*Team Leader & Development Member*

[https://github.com/AndyFCui/Amazon\\_QA\\_Robot/tree/main](https://github.com/AndyFCui/Amazon_QA_Robot/tree/main)

- 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, **LOSS**, and **BLEU** score metrics for evaluation.
- Conducted **K-Fold** Cross-Validation and ablation studies to optimize model performance and robustness.

### Robot Shop Database (SQL)

Boston, MA, USA | Jan. 2023-May. 2023

*Project Leader & Designer*

<https://github.com/AndyFCui/OnlineShop-Database>

- 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.

### Regression-Based Supervised Learning for Predicting Weld Depression Profiles

Boston, MA, USA | Sept. 2022-Dev. 2022

### Northeastern University Khoury College Course Project (Machine Learning)

*Requirements Analysis, Design & Development Member*

[https://github.com/AndyFCui/Regression-](https://github.com/AndyFCui/Regression-BasedSupervisedLearning_for_PredictingWeldDepressionProfiles)

[BasedSupervisedLearning\\_for\\_PredictingWeldDepressionProfiles](https://github.com/AndyFCui/Regression-BasedSupervisedLearning_for_PredictingWeldDepressionProfiles)

- Designed **Regression-Based** Supervised Learning for Predicting Weld Depression Profiles of Thin-walled Wind Tower Sections.
- Used four ways to evaluate data: **R-Squared**, **Pearson's Correlation**, **Mean Squared Error**, **Kendall's Tau (Base Python)**
- Predicted the average radial deviations (w values) by using the longitudinal position along the length of the tube (d values). Then find the better model for the regression problem about our target value w(d) represents the averaged value of weld depression.