

EDUCATION**Columbia University in the City of New York**

NY, US

M.S. in Computer Science - Machine Learning Track

Exp May 2024

- Core Courses: Natural Language Processing; Machine Learning; Deep Learning; Computer Vision; AI; Database; Cloud Computing; Engineering Software-as-a-Service; Cryptography.

University of Electronic Science and Technology of China

Sichuan, China

B.S. in Information Security

Jun 2019

- Honor: 3rd Prize Scholarship.
- Core Courses: Data Structure and Algorithm; Computer Network; Operating System; Programming with C/C++.

TECHNICAL SKILLS & LANGUAGES

- Tech Skills: Python, Linux, C++, SQL, TensorFlow, PyTorch, Ruby on Rails, HTML, CSS, JavaScript, Testing, React, MongoDB, AWS, Google Cloud Platform, Distributed System, Microservice, Node.js, Git, Swift (studying).
- Languages: Chinese (native), English (proficient).

WORKING EXPERIENCE**China Mobile Communications Group Co.,Ltd.**

Anhui, China

System Support Engineer, Business Support Center

Jul 2020 - Sep 2021

- Led the development of a high-performing e-commerce platform on China Mobile Cloud, employing HTML, CSS, JavaScript, jQuery, and Bootstrap for the frontend, and Python/Django for the backend. Integrated a collaborative filtering recommendation algorithm, driving a 1.8% monthly revenue increase.
- Designed and maintained robust APIs for real-time data interaction, significantly enhancing system responsiveness and user satisfaction.
- Developed a desktop tool predicting potential 5G subscribers using decision trees, which reduced 5G plan acquisition costs by 6.7% within three months. Ensured a user-friendly interface with HTML, CSS, and JS, simplifying employee interaction.
- Managed SQL databases for over 1,000,000 customer profiles, ensuring data integrity and high performance. Collaborated with a 12-person team to implement Tableau for data visualization, supporting the sales of China Mobile Cloud products to enterprise customers.
- Implemented Git for version control and streamlined deployment processes using CI/CD practices, improving workflow efficiency and code quality.

PROJECTS**Advanced Analytics for Search Optimization and Predictive Modeling on GCP**

NY, US

Course Project

Jan 2024 - Apr 2024

- Implemented a feedback system using Rocchio algorithm on GCP, achieving over 90% accuracy after one iteration.
- Collaborated with one teammate to integrate SpaCy, SpanBERT, and Gemini to do data mining for a more intelligent search experience.
- Collaborated to do data mining to identify key predictors of business closures in NYC, leveraging advanced analytics to drive strategic urban planning decisions.

Image Captioning with Multi-Head Attention and Transformer

NY, US

Course Project

Oct 2023 - Dec 2023

- Developed an image captioning system using multi-head attention and Transformer architecture to improve the automatic generation of captions from images.
- This project leveraged the Flickr8k dataset and achieved a notable BLEU-4 score exceeding 60%.

Collaborative Development of a Second-Hand Marketplace

NY, US

Course Project

Oct 2023 - Dec 2023

- Led a 4-person team to develop a second-hand marketplace platform using Node.js, focusing on full-stack development from initial design through deployment.
- Integrated React components to improve frontend interactivity and user experience.
- Automated infrastructure provisioning and configuration using Terraform (Infrastructure as Code - IaC).
- Managed task allocation across frontend, backend, and testing phases employing Behavior-Driven Development (BDD) and Test-Driven Development (TDD).
- Designed user-centric features to enhance platform usability:
 - Enabled user registration and login capabilities, including seamless integration with Google accounts.
 - Implemented Google Maps API for address validation in user profiles.
 - Developed a product creation feature with photos stored in S3, and title, price, and descriptions hosted on PostgreSQL on EC2.
 - Created a responsive web interface deployed on S3 for optimal viewing across various devices.
 - Added a product deactivation feature post-purchase and developed a buyer rating system with reviews visible on seller profiles.
- Championed the use of Cucumber and RSpec for testing, achieving 100% coverage, and leveraged CI/CD practices to automate code testing to ensure high code quality and seamless updates.