XU Cheng

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EDUCATION

Bachelor's Degree in Data Science and Big Data Technology Sep 2018 - Jun 2022

College of Computer and Science, **Huaibei Normal University**, Anhui, China

GPA: **89.01/100 (Top 1 of Major, Rank 1/83)**

Related Courses: C Language Programming (95), Data Structure (91), Operating System (92), Computer Network (95), Computer Organization Principles (92), Machine Learning (94), Linear Algebra (91), Recommendation System (99), Big Data Technology Principle and Application (94), Data Analysis (93).

ACADEMIC ACHIEVEMENTS

- **Xu C**, Wang J, Zheng T, Cao Y, Ye F. Prediction of Prognosis and Survival of Patients with Gastric Cancer by Weighted Improved Random Forest Model. Archives of Medical Science. 2021. doi:10.5114/aoms/135594.
- **Xu C**, Chen Q, Ye F, Fan Q, Wang Q. Selection of surgical procedures and analysis of prognostic factors in patients with primary gastric tumour based on Cox regression: a SEER database analysis based on data mining. Gastroenterology Review/Przegląd Gastroenterologiczny. 2021;16(2):144-154. doi:10.5114/pg.2021.106666.
- **Xu C**, Zhang Z, Zheng T, Lei S. An intelligent wind speed and direction measurement device based on Computer Vision. CN2021203633317. (*Patent under review, in Chinese*)
- Chen C, Liu W, **Xu C**, Liu T. Artificial Intelligence image optimization recognition display system V1.0. 2021SR1066174. (*Computer Software Copyright, in Chinese*)
- **Xu C**, Ye F, Fan Q. Training an Excellent Artificial Intelligence Gamer with Multimodal Deep Reinforcement Learning (*Working Paper*)

SELECTED HONORS & AWARDS

- The First Prize Scholarship (Top 3%) 2019-2020, 2020-2021
- University-level Outstanding Learning Scholarship 2019-2020, 2020-2021
- 2020 "Huaibei Normal University Outstanding College Students" honorary title Nov 2020
- CET-6: 450 Aug 2021
- Third Prize of 2020 Anhui Network and Distributed Innovation Design Competition Dec 2020
- Individual Award of 2020 Boao Education Forum Artificial Intelligence Application Challenge Oct 2020
- Second Prize of 2020 Anhui Big Data and Artificial Intelligence Application Competition Oct 2020
- Special Prize of 2019 programming marathon of the College of Computer Science and Technology of Huaibei Normal University (Top 1) Nov 2019
- Third Prize of the 10th Blue Bridge Cup C/C++ Language Programming Contest Mar 2019

PROJECT EXPERIENCE

Research on Cancer Damage Prediction Based on Data Mining and Machine Learning

Project Manager Jun 2019 - Jun 2021

- Led and supervised the cancer damage prediction project funded by the **National University Student Innovation and Entrepreneurship in P.R. China**, under Grant 202010373032 and Grant S201910373149.
- The project achievements are recommended to participate in **the 14th China University Students Innovation and Entrepreneurship Annual Conference**.

- **Spearhead the entire development circle of this project**, including data preparation, collection, cleaning, imputation, modeling and data evaluation.
- Applied various **Machine Learning** models on the datasets, including classic models (Random Forest, Decision tree) and our improved models.
- Evaluated model performances using **AUC**, **ROC curves** and **UCI repository**.

Research on Network attack Monitoring and Classification based on Big Data and Machine Learning

Data Scientist Oct 2020 - Present

- This work was funded by the **National University Student Innovation and Entrepreneurship in P.R. China** under Grant 202110373041, and the main purpose is to identify and analyze abnormal network traffic records from **massive data** (more than 2 million) by using **big data technology**.
- Applied various Machine Learning models (**Neural Network**, **Reinforcement Learning**).
- Conducted exploratory **data analysis** and **visualized** network traffic in different graphs to further detect patterns in different network attacks, and the trained model has practical application value.

Predictive Research on Psychological Emotional Needs Analysis Based on Big Data

Data Scientist Aug 2021 – Present

- This work was funded by the **National University Student Innovation and Entrepreneurship in P.R. China** under Grant 202110373044. and the main purpose is to use Deep Learning (**PyTorch**) and Scientific computing (**NumPy**, **Pandas**) framework to process text data obtained through **Web scraping**.
- Using **Natural language processing** (**NLP**) to mine the value behind the data, so as to judge, explain and predict the psychological emotion exposed.

Prognostic Prediction of Pancreatic Cancer Based on Machine Learning

Data Scientist Aug 2021 – Present

- This work was funded by the **National University Student Innovation and Entrepreneurship in P.R. China** under Grant 202110373042. Mainly use **Multi-label** Classification algorithm for **Survival Analysis**.
- Machine Learning models (**Neural Networks**, **Ensemble Learning**) are implemented in this research.

ACADEMIC SERVICE & INTERNSHIPS

Data Mining Lab of College of Computer and Science, Huaibei Normal University

Researcher Nov 2018 - Present

- I led and participated in **five scientific research projects** under the guidance of Associate Professor Fan Qi, head of the Department of Intelligent Science and Big Data Technology.
- During this period, I independently completed the writing of **two academic papers**, obtained **a patent** and **a software copyright** registration.
- Participate in the maintenance of **big data server cluster** of the College of computer Science and Technology, and held the role of **laboratory manager** in the third year of the university.

iTalenta, Denver, CO, USA

Data Analysis Intern Feb 2021 – May 2021

- Analyze and research the needs of target customers, including the use of **databases**.
- Conduct data extraction and processing, and establish **analysis** and **data mining** models. This includes tasks such as **user profile** and **association analysis**.
- **Big data technology**, such as Hadoop, Hive, Flume etc. were used in this internship.

SKILLS LIST

Programming Languages: Python3 (proficient), JAVA, C/C++, R.
Operating Systems & Platform: Centos, Ubantu, MS SQL Server, Hadoop.
Development Tools: Anaconda3, Scikit-learn, Keras, PyTorch, Web scraping.