Cheng Xu

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EDUCATION	**University College Dublin**, Dublin, Ireland	Sep 2022 - Present
	Ph.D. Candidate, Computer Science	
	Supervisor: Prof. M-Tahar Kechadi	
	Tentative Thesis Title: Deep Learning to Combat the Diffusion in Fake News	
	Huaibei Normal University, Huaibei, P.R. China	Sep 2018 - Jun 2022
	B.Eng., Data Science and Big Data Technology	
	Mentor: Prof. Qi Fan & Prof. Longfeng Shen	
	GPA: 90.34/100, Graduated with Provincial Honor (Highest for graduates)	

HONORS	**Graduate with Honor of Anhui Province (Top 3%)**, Anhui Province Government	2022
	Graduate with Honor (Top 10%), Huaibei Normal University	2022
	"Top 100 Outstanding College Students" honorary title, Anhui Province Government	2021
	"Top Ten College Students" honorary title, Huaibei Normal University"	2021
	First Prize Scholarship for Innovation (Top 15), Huaibei Normal University	2021
	First Prize Scholarship (Top 3%) Huaibei Normal University	2019 – 2021
	Academic Excellence Award, Huaibei Normal University	2019 – 2021

PUBLICATIONS

* indicates co-first authorship.

[1] **Cheng Xu**, Nan Yan. AROT-COV23: A Dataset of 500K Original Arabic Tweets on COVID-19. (ICLR 2023, AfricaNLP Workshop)

[2] **Cheng Xu**, Jing Wang, Tianlong Zheng, Yue Cao, Fan Ye. Prediction of prognosis and survival of patients with gastric cancer by a weighted improved random forest model: an application of machine learning in medicine. (Archives of Medical Science, 2022.)

[3] **Cheng Xu**, Qingling Chen, Fan Ye, Qi Fan, Qing Wang. 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, 2021.)

WORK EXPERIENCE	**Ph.D. student**, Insight SFI Research Centre for Data Analytics	Sep 2022 - Present

- Led the development of a multi-perspectives based fake news detection system.

Research Assistant, Data Mining Lab of Huaibei Normal University   Nov 2018 - Oct 2021

- Conducted research in data mining under the supervision of Prof. Qi Fan.
- Demonstrated leadership skills by leading and contributing to five scientific research projects.
- Managed laboratory operations and resources in the third year of my undergraduate, enhancing my organizational and project management skills.

ACADEMIC SERVICES

Journal Reviewer: Archives of Medical Science

PROJECT EXPERIENCE

Cancer Damage Prediction Using Data Mining and Machine Learning

Project Manager   Jun 2019 - Jun 2021

- Led and supervised a cancer damage prediction project that was funded by the National University Student Innovation and Entrepreneurship Program in P.R. China, under Grant 202010373032 and Grant S201910373149.
- Recommended the project achievements for participation in the 15th China University Students Innovation and Entrepreneurship Annual Conference.
- Spearheaded the entire development cycle of the project, including data preparation, collection, cleaning, imputation, modeling, and evaluation.
- Applied various machine learning models on the datasets, including both classic models (Random Forest, Decision tree) and our improved models.

Network Attack Monitoring and Classification based on Big Data and Machine Learning

Data Scientist   Oct 2020 - Present

- Funded by the National University Student Innovation and Entrepreneurship program in P.R. China under Grant 202110373041, the results of the project are expected to have practical application value.
- Conducting research on identifying and analyzing abnormal network traffic records from a massive dataset (over 2 million records) using big data technologies.
- Utilizing machine learning models such as neural networks and reinforcement learning to classify different types of network attacks.
- Performing exploratory data analysis and visualizing network traffic using various graphs to detect patterns in network attacks.

Predictive Research on Analyzing Psychological Emotional Needs Based on Big Data

Data Scientist   Aug 2021 - Present

- Received funding from the National University Student Innovation and Entrepreneurship in P.R. China under Grant 202110373044.
- The project aims to use deep learning techniques and scientific computing libraries (NumPy, Pandas) to analyze text data obtained through web scraping.
- Applied natural language processing (NLP) to extract valuable insights from the data, enabling the identification, explanation, and prediction of emotional states.

Prognostic Prediction of Pancreatic Cancer Based on Machine Learning

Data Scientist   Aug 2021 - Present

- This research project is funded by the National University Student Innovation and Entrepreneurship in P.R. China under Grant 202110373042.
- Apply Multi-label Classification algorithm for Survival Analysis, utilizing Machine Learning models such as Neural Networks and Ensemble Learning.
- Work collaboratively with a team of researchers to analyze and interpret the data, as well as to develop and optimize the predictive models.