Zheng Yuan

Research Assistant

A motivated student towards PhD in Artificial Intelligence. Experienced in Computer Vision, Interdisciplinary Research. Adept at programming, data analysis, web scraping and scientific writing.

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EDUCATION

MSc. Cognitive and Computational Neuroscience
The University of Sheffield

09/2020 - 10/2021 *Sheffield, UK*

B.E. Civil Engineering
Jilin University (985&211)

09/2013 - 07/2017 *Changchun, China*

WORK EXPERIENCE

Research Assistant
Health Informatics Lab (HILab)

11/2021 - Present *Changchun, China*

Major Responsibilities

- Working with the principal investigator Professor Fengfeng Zhou to conduct and coordinate qualitative research
- Data acquisition, preprocessing and cleaning
- Coding and testing research methods
- Visualizing results and writing paper
- Lab servers maintenance

Contact : Prof. Fengfeng Zhou - ffzhou@jlu.edu.cn

Budget Control Engineer
China State Construction Engineering Corporation (CSCEC)

07/2017 - 08/2020 *Shenyang/Chongqing, China*

Major Responsibilities

- Introduced internal controls to monitor critical areas of financial control and devised corrective actions to address risks or deficiencies
- Provided treasury and cash management by overseeing reconciliation of banking activity, enterprise credit and taxation
- Worked with executives to create annual budget and track actual expenses against projected expenses

REFEREES

Prof. Fengfeng Zhou, ffzhou@jlu.edu.cn
PI of Health Informatics Lab & RA Supervisor

Prof. Lincong Zhou, lczhou@jlu.edu.cn
Undergraduate head teacher

SKILLS

`Deep Learning with PyTorch`

`Scientific Writing (LaTeX & MS Office)`

`Web Scraping (Scrapy & Selenium)`

`Server Maintenance and Management`

`Website Development` `Data Analysis`

RESEARCH PROJECTS

A two-stage algorithm for objects detection and classification on aerial images. (08/2022 - Present)

- Focus: improve performance on densely-distributed small objects detection and classification

Computational detection and validation of dark biomarkers for Papillary Thyroid Cancer (PTC) using the Model-based Quantitative Transcriptional Regulation Relationships (mqTrans) measurement in the Mitogen-Activated Protein Kinase (MAPK) pathway with four independent datasets. (11/2021 - Present)

- Rewrite the Model-based Quantitative Transcriptional Regulation Relationships (mqTrans) method into a pipeline with multiple functionalities, including data cleaning, customizing features input, auto literature searching and etc.
- Writing in process (first author).

Lung cancer early detection and classification with 3D-CNN (11/2021 - 01/2022)

- Lab training project.

Cortical Reorganizations in The Primary Visual Cortex (V1) Caused by Lesions: A Simulation and Visualization. (03/2021 - 09/2021)

- (MSc Thesis) Simulating how the primary visual cortex V1 will reorganize in response to partial input loss using the Gain-Control, Adaptation and Lateral (GCAL) model. Results showed the GCAL model is very robust to partially input loss.

LANGUAGES

English (TOEFL iBT 102)
Full Professional Proficiency

Chinese
Native or Bilingual Proficiency