# XUE, SUQI

▪ +86 19858113139 ▪ suqi.xue@hdu.edu.cn
Research Interests: Medical Image/Signals Processing, Deep Learning, Large Model
1158 2nd Street, Qiantang District, Hangzhou, Zhejiang Province, 310018, China

## EDUCATION

**PH.D. CANDIDATE OF CONTROL SCIENCE AND ENGINEERING**  SEP. 2024 – PRESENT
*School of Automation, Hangzhou Dianzi University*  *HANGZHOU, CHINA*
***Course:****Artificial Intelligence(95), Introduction to Computational Intelligence(A), Engineering Matrix Theory(98)*

**B.ENG. OF AUTOMATION**  SEP. 2020 – JUN. 2024
*School of Automation, Hangzhou Dianzi University*  *HANGZHOU, CHINA*
***Honor:*** *GPA: 4.306/5.0 (Ranked 15/219), National Encouragement Scholarship(China)*
***Awards:*** *Outstanding Student Cadre, Triple-A Student, Provincial Merit Student(Zhejjiang).*
***Course:*** *Automatic Control Principles, Analog Electronic Circuits, Machine Vision*

## PUBLICATIONS

- *Suqi Xue,* Dinghan Hu, Hengyuan Li and Jiuwen Cao. "**MRI-Based Characterization and Identification of Garland-Shaped Pelvic Chondrosarcoma**." IEEE Signal Processing Letters. (2025) Under Review. **(SCI)**
- *Suqi Xue,* Farong Gao, Xudong Wu, Qun Xu, Xuecheng Weng, and Qizhong Zhang. "**MUNIX repeatability evaluation method based on FastICA demixing.**" Mathematical Biosciences and Engineering 20, no. 9 (2023): 16362-16382.**(SCI)**
- Xu, Qun, *Suqi Xue*, Farong Gao, Qiuxuan Wu, and Qizhong Zhang. "**Evaluation method of motor unit number index based on optimal muscle strength combination.**" Mathematical Biosciences and Engineering. 20 (2023): 3854-3872. **(SCI)**
- *Suqi Xue*, Zhaoming Ye, Kexin Hu, Xingzhi Zhou, Zhaonong Yao, Dinghan Hu, Jiuwen Cao, and Hengyuan Li. "**Chondrosarcoma of the Pelvis Recognition Based on MRI Radiomics.**" In International Conference on Machine Learning, Cloud Computing and Intelligent Mining, pp. 153-163. Singapore: Springer Nature Singapore, 2024. **(EI)**
- Ziyuan Chen, Xinyi Xuan, Shuzhe Duan *Suqi Xue*, & Yong Peng, "Semi-Supervised Adaptive Label-Regression EEG-Based Emotion Recognition Method for Automatic Anomaly Detection," CN Patent No. 202211440751.6; Granted June 30, 2023 **(Invention Patent)**

## RESEARCH EXPERIENCE

**GRADUATE RESEARCH INNOVATION FUND OF HDU***(PROJECT NO. CXJJ20252128)*  **LEADER**
*Analysis and recognition of radiomics features of pelvic chondrosarcoma based on MRI*  *June 2025 – June 2026*
- Conducted MRI acquisition, 3D semi-automatic tumor segmentation, and development of an automated LMMU-Net model for pelvic chondrosarcoma localization.
- Extracted radiomic features (first-order, shape, texture, LoG, Wavelet); performed LASSO+RFE feature selection; built and validated a diagnostic model; and led documentation, analysis, and project coordination.

**NATIONAL INNOVATION AND ENTREPRENEURSHIP TRAINING PROGRAM***(PROJECT NO. 202210336024)*  **LEADER**
*Development of Cardiovascular Disease Risk Prediction System Based on PWV and ABI*  *May 2022 – May 2024*
- Collected and analyzed pulse wave velocity (PWV) and ankle–brachial index (ABI) to predict cardiovascular disease Srisk, refining algorithms for precision and deploying portable, cost-effective sensors.
- Extracted PWV/ABI features; built and validated a logistic-regression model; designed sensor schematics in CAD; authored reports and presentations; managed task allocation; and led the project defense.

**ZHEJIANG PROVINCIAL NEW TALENT PROGRAM***(PROJECT NO. 2021R407016)*  **LEADER**
*Research on Cardiac Risk Prediction Based on ECG Signal Cyclostationary Features*  *Jun 2021 – Jun 2023*
- Analyzed differential heart rate variability (HRV) metrics—non-invasive indicators of cardiac autonomic activity—to develop methods for predicting sudden cardiac death (SCD)
- Extracted stationary HRV features; designed and optimized an echo state network for SCD prediction; authored technical reports and presentations; and led the project defense.

**10TH CHINA INTERNATIONAL MATHEMATICAL MODELING COMPETITION (MCM)**  **TEAM LEADER**
*Wave Energy Output Optimization Using Differential Equations and Single-Objective*  *Jan 2021 – Feb 2021*
- Developed dynamic models and optimization methods for wave-energy extraction, implemented Runge–Kutta–based simulations, contributed to algorithm coding and paper translation, and helped the project win Finalist Award(top 2%).

## SKILLSETS

- **Programming/Software:** Python; MATLAB; C; Keil IDE; R language; AutoCAD; Office Suite (Word, Excel, PPT)
- **Technical:** Signal Processing, Machine Learning, Medical Image/Signals Processing, Large Model
- **Languages:** Mandarin (native), English (fluent)