RUNZHE ZHU

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Education

Shanghai University of Engineering Science   **2020 – 2023**
M.S. Artificial Intelligence & Shanghai, China   *GPA: 3.31/4.0*

Zhejiang Shuren University   **2016 – 2020**
B.S. Communication Engineering & Hangzhou, China

Research Experience

Fusion Computing and Location Services Group   *Graduate Researcher*   **Oct 2020 – June 2023**
↪ Prof. Fei Wu   *School*

- Built a geo-localization benchmark dataset SUES-200 and shared it with community.
- Set a series of evaluation metrics for the SUES-200 to measure the robustness of different models.
- stablished a representations fusion method based on multimodal and bilinear pooling achieve the SOTA results on existing datasets.

Jiang's Labs   *Graduate Researcher*   **Oct 2019 – June 2020**
↪ Dr. Wei Jiang   *School*

- Analysis and prediction of postgraduate entrance examination score line based on LSTM.

Work Experience

Jiaxing Research Institute Zhejiang University   *CV Algorithm Engineer*   **Mar 2023 - Present**

- Develop machine learning algorithms for scoring 2D/3D medical image registration results.
- Develop speed estimate algorithm based on event-vision camera.

Qianxun Spatial Intelligence Inc   *Test Development Intern*   **Jul 2022 - Sept 2022**

- Participated in automated testing work through pipeline tools, such as Jenkins, and Pytest. Application of high-precision positioning equipment.

Shanghai University of Engineering Science   *Teaching Assistant*   **Dec 2021 - Jun 2022**

- Guide undergraduates to use deep learning methods to complete their graduation projects in Geo-Localization.

Publications

[1] **Zhu, Runzhe**, L. Yin, M. Yang, F. Wu, Y. Yang, and W. Hu, "Sues-200: A multi-height multi-scene cross-view image benchmark across drone and satellite," *IEEE Transactions on Circuits and Systems for Video Technology*, pp. 1–1, 2023.

[2] **Zhu, Runzhe**, M. Yang, L. Yin, F. Wu, and Y. Yang, "Uav's status is worth considering: A fusion representations matching method for geo-localization," *Sensors*, vol. 23, no. 2, p. 720, 2023.

[3] **Zhu, Runzhe**, M. Yang, K. Zhang, F. Wu, L. Yin, and Y. Zhang, "Modern backbone for efficient geo-localization," *Proceedings of the 31th ACM International Conference on Multimedia Workshop*, 2023.

[4] M. Cai, **Zhu, Runzhe**, F. Wu, K. Zhang, and J. Li, "Cross-view matching model based on attention mechanism and multi-granularity feature fusion," *Journal of Computer Applications*.

[5] M. Yang, H. Zhu, **Zhu, Runzhe**, F. Wu, L. Yin, and Y. Yang, "Witransformer: A novel robust gesture recognition sensing model with wifi," *Sensors*, vol. 23, no. 5, p. 2612, 2023.

[6] Y. Yang, F. Wu, H. Zhu, **Zhu, Runzhe**, and M. Yang, "Adaptive step detection method combining cnn-bilstm-sa motion pattern recognition," *GNSS World of China*, vol. 48, no. 71-80, 2023.

Awards

National Second prize, "Huawei Cup" China Post-graduate Mathematic Contest in Modeling   **2021**

National Third prize, "Optics Valley & Huawei Cup" China Post-graduate Mathematic Contest in Modeling   **2022**

Shanghai Second Prize, The 16th China Post-graduate Electric Design Contest   **2021**

Shanghai University of Engineering Science Second prize Scholarship   **2020, 2021, 2022**

Technical Skills

Programming Languages	Python, C++, C#
Machine Learning	Pytorch, Tensorflow, Pandas, Numpy, Sklearn
Office	MS Office, LaTeX
Languages	Chinese(Native), English (IELTS 6.5 Overall)

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