

# XIYAO FU 傅熙尧

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<https://xiyaofu.github.io/>

<https://scholar.google.com/citations?user=vIix990AAAAJ&hl=en>

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## EDUCATION

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**University of Pittsburgh** 09/2021–05/2023

- MSc in ECE Pittsburgh, PA, USA
- Advisor: Dr. Liang Zhan
- Overall GPA: 3.938/4.0

**University of Electronic Science and Technology of China** 09/2013-07/2017

- BE in ECE Chengdu, China
- Overall GPA: 3.76/4.0; Major GPA: 3.93/4.00
- Thesis: A CBIR System Based on Zero-Shot Hashing

## WORK EXPERIENCE

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**Research Assistant, Pu Lab, UPMC presbyterian** 05/2023-10/2023

- Advisor: Dr. Jiantao Pu
- Focusing on survival analysis using attention-based deep networks (one paper in progress).

**Research Assistant, ECE Swanson, UPitt** 09/2021-05/2023

- Advisor: Dr. Liang Zhan
- Focusing on researches in medical image segmentation (by graph neural networks and self-attention-based methods in single-modal/multi-modal scenarios).

**Research Assistant, Center for Future Media, UESTC** 07/2017-12/2020

- Advisor: Dr. Yang Yang
- Focusing on information retrieval (especially deep hashing) and transfer learning (especially zero-shot learning).

## TEACHING

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**Teaching Assistant, ECE Swanson, UPitt** 09/2022-present

Course: *Digital Circuits and Systems (ECE 0201)*

## PUBLICATIONS

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- **3D Bi-Directional Transformer UNet for Medical Image Segmentation.** Xiyao Fu, Zhexian Sun, Haoteng Tang, Hansong Gao, Eric Zou, Heng Huang, Yong Wang, Liang Zhan. *Frontiers in Bid Data* (to appear), 2022.
- **Signed graph representation learning for functional-to-structural brain network mapping.** Haoteng Tang, Lei Guo, Xiyao Fu, Yalin Wang, Scott Mackin, Olusola Ajilore, Alex D Leow, Paul M Thompson, Heng Huang, Liang Zhan. *Medical Image Analysis (MIA)*, 2022.
- **Contrastive Brain Network Learning via Hierarchical Signed Graph Pooling Model.** Haoteng Tang, Guixiang Ma, Lei Guo, Xiyao Fu, Heng Huang, Liang Zhan. *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, 2022.
- **Functional2Structural: Cross-Modality Brain Networks Representation Learning.** Haoteng Tang, Xiyao Fu, Lei Guo, Yalin Wang, Scott Mackin, Olusola Ajilore, Alex Leow, Paul Thompson, Heng Huang, Liang Zhan.

arXiv:2205.07854

- **Hierarchical Brain Embedding Using Explainable Graph Learning.** Haoteng Tang, Lei Guo, Xiyao Fu, Benjamin Qu, Paul M Thompson, Heng Huang, Liang Zhan. International Symposium on Biomedical Imaging (ISBI), 2022
- **A hierarchical graph learning model for brain network regression analysis.** Haoteng Tang, Guixiang Ma, Lei Guo, Xiyao Fu, Heng Huang, Liang Zhan. Frontiers in Neuroscience, 2022
- **Supervised Hashing with Recurrent Scaling.** Xiyao Fu, Yi Bin, Zheng Wang, Si Chen. 3<sup>rd</sup> Asia Pacific Web and Web-Age Information Management Joint Conference on Web and Big Data (APWeb-WAIM), 2019\_
- **BMC@MediaEval 2017 Multimedia Satellite Task via Regression Random Forest.** Xiyao Fu, Yi Bin, Liang Peng, Jie Zhou, Yang Yang, Hengtao Shen. MediaEval, CEUR Workshop Proceedings, Vol. 1984 (2017)
- **CFM@MediaEval 2017 Retrieving Diverse Social Images Task via Re-Ranking and Hierarchical Clustering.** Liang Peng, Yi Bin, Xiyao Fu, Jie Zhou, Yang Yang, Hengtao Shen. MediaEval, CEUR Workshop Proceedings, Vol. 1984 (2017)

## **SERVICE**

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**Reviewer, Biomedical Engineering(J)**

01/2022-present

## **PATENTS**

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- **An Image Retrieval Technique Using DRSH.** (Applying) Based on paper Supervised Hashing with Recurrent Scaling. 06/2019

## **SKILLS**

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- **PROGRAMMING:** Python, Matlab, Verilog, Latex
- **Others:** Powerpoint, Linux, Word, Ubuntu
- **Languages:** Mandarin (Native), English (Advanced), Germany (Beginner)

## **HONORS AND AWARDS**

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- First-Class People's Scholarship, UESTC 09/2017
- Honorable Mention, MCM/ICM 02/2016
- Meritorious Winner, Mathematical Contest in Modeling of UESTC 06/2015

## **MISC**

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- TOEFL iBT: 108 (Reading: 29, Listening:29, Speaking: 23, Writing: 27) 1/2021
- GRE: 327 (Verbal: 157, Quantitative: 170, Analytical Writing: 3.0) 09/2017