

# Ruru Xu

*Citizenship: Chinese*

*E-mail: xu21@itu.edu.tr*

[Personal website](#)

[Google scholar page](#)

*Updated: April 2025*



## PROFILE

I am a PhD student at Istanbul Technical University, Computer Engineering, where I have studied since 2021. I work as a researcher in the 2232 International Fellowship for Outstanding Researchers Program of TUBITAK(Project No: 118C353). My research focuses on MRI reconstruction using deep learning and reinforcement learning methods. My professor is Ilkay Oksuz.

From 2018 to 2020, I was an exchange student at the Lab of Interactive Media Computing at Fudan University. During this time, my research interests centered on object detection and semantic segmentation, working under the guidance of Professor Cheng Jin.

In 2020, I received my Master's degree in Engineering Computer Software and Theory. I pursued my Master's studies at the SICT(Shanghai Institute of Computing Technology) from 2017 to 2020, with a research direction in computer vision. My professor is Xinli Min. During my Master's studies, I also interned at Shanghai Shen Teng Technology Co., Ltd. from 2017 to 2020. My work there involved contributing to smart city-related projects.

I earned my Bachelor's degree in Computer Science and Technology in 2016.

## EDUCATION and RESEARCH EXPERIENCE

*PhD Candidate,* **March 2021-present**  
Computer Engineering  
**Istanbul Technical University, Istanbul, Turkey**

*Exchange learning,* **April 2018-March 2020**  
Lab of Interactive Media Computing  
**Fudan University, Shanghai, China**

*Master's Degree,* **September 2017-March 2020**  
Engineering Computer Software and Theory  
**Shanghai Institute of Computing Technology(SICT), Shanghai, China**  
*Thesis:* Research and Implementation of Intelligent Evaluation Algorithm of Street Cleanli-

ness Based on Vision **Online**

*Bachelor's degree,*  
Computer Science and Technology  
**Liaocheng University, Liaocheng, China**

**September 2012-July 2016**

### **Work Experience**

*Student Intern,*  
R&D department  
**Shanghai Shen Teng Technology Co., Ltd., Shanghai, China**  
*Working on smart city related projects*

**September 2017-March 2020**

### **PUBLICATIONS**

#### **Journal Papers:**

- Wang F, ...etc., Towards Universal Learning-based Model for Cardiac Image Reconstruction: Summary of the CMRxRecon2024 Challenge. arXiv preprint arXiv:2503.03971. (Submitted to Top Journal: TPAMI; IF:20.8), 2025. **Online**
- **Xu R**, Oksuz I. A Reinforcement Learning Approach for Optimized MRI Sampling with Region-Specific Fidelity. Neurocomputing (Q1, IF: 5.5), 2025. **Online Code**
- **Xu R**, Oksuz I. Segmentation-aware MRI subsampling for efficient cardiac MRI reconstruction with reinforcement learning. Image And Vision Computing (Q1, IF: 4.2), 2024. **Online**

#### **Conference Papers:**

- **Xu R**, Özer C, Oksuz I. HyperCMR: Enhanced Multi-Contrast CMR Reconstruction with Eagle Loss. (MICCAI 2024 -CMRxRecon2024 Challenge). **Online Code Presentation**
- **Xu R**, Oksuz I. Efficient MRI reconstruction with reinforcement learning for automatic acquisition stopping. (MICCAI 2022, STACOM Workshop). **Online Presentation**
- **Xu R**, An J, Su L, Min X. Banknotes serial number coding recognition.” In 2019 IEEE International Conference on Big Data (Big Data), pp. 5101-5107. IEEE, 2019. **Online**

### **HONORS and AWARDS**

*5th Place Award*, CMRxRecon2024 Challenge (MICCAI)2024, Morocco **October 2024**  
**Certification**

*Full Ph.D. Scholarship,*  
Istanbul Technical University, Istanbul, Turkey

**March 2021-present**

### **TOEFL score**

- Score: 108 · Jan 2021, Reading:28, Listening:26, Speaking:24, Writing:30

### **REFERENCES**

- Ilkay Oksuz  
Assoc. Prof., Istanbul Technical University, Computer Engineering Department  
Research Associate, King's College London, Biomedical Engineering Department  
E-mail: oksuzilkay@itu.edu.tr
- Cheng Jin  
School of Computer Science, Shanghai Key Lab of Intelligent Information Processing,  
Fudan University, Shanghai, China  
Innovation Center of Calligraphy and Painting Creation Technology, MCT, China,  
Fudan University, Shanghai, China  
E-mail: jc@fudan.edu.cn
- Xinli Min  
Shanghai Energy saving Engineering and Technology Association (SESETA)  
Shanghai Shen Teng Technology Co., Ltd.  
E-mail: mizhui@sina.com