



Yuxin Zhang

Ph.D. Candidate

1997-09-24

LS2N, Centrale Nantes

France

Google Scholar

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Yuxin-Zhang-Jasmine

digital C.V.

Education

present	LS2N, Centrale Nantes, France
2021.09	Ph.D. Candidate • Advanced Learning Models for the Reconstruction of Ultrasound Images
2021.06	Centrale Nantes, France
2019.09	2 nd Year Master • Signal and Image Processing 1 st Year Master • Industrial Engineering
2019.06	Harbin Institute of Technology, China
2015.09	Bachelor's Degree • Civil Engineering

Skills & Languages

AI Tools	Pytorch, Tensorflow
Coding	MATLAB, Python
OS	Linux
US Tools	Field-II, K-Wave, MUST, Aria
Other Tools	Git, Conda, HPC, Latex
English	B2 (work), Chinese (native),
Languages	French B2 (DELF Certificate)

Projects

- Ultrasound image reconstruction by solving an inverse problem using Denoising Diffusion Restoration Models. **Accepted** by DGM4MICCAI (Deep Generative Models Workshop @MICCAI) 2023. [Code Link](#), [Paper Link](#)
- Ultrasound despeckling based on the stochasticity of diffusion models. **Accepted** by EUSIPCO (European Signal Processing Conference) 2024. [Code Link](#), [Paper Link](#)
- Ultrasound Image Enhancement with the Variance of Diffusion Models **Accepted** by IUS (International Ultrasonics Symposium) 2024.
- Multi-angle planar wave 3D ultrasound imaging with physics-informed implicit neural networks. (ongoing) **Accepted** by IUS (International Ultrasonics Symposium) 2024.
- RF data decluttering using an optimized ADMIRE with hyperbolic regularization. ([abstract link](#))

Presentations

2024.03	Ultrasound Imaging based on the Variance of a Diffusion Restoration Model. IABM , Grenoble, France. Poster , Photo
2023.10	Ultrasound Image Reconstruction with Denoising Diffusion Restoration Models. DGM4MICCAI@MICCAI2023 , Vancouver, Canada. Slides
2023.06	Ultrasound Image Reconstruction with Deep Learning. ED_seminar , Vannes, France. Slides , Video
2023.03	Ultrasound Image Reconstruction by Solving an Inverse Problem with Denoising Diffusion Restoration Models. AiBy4_DAY , Nantes, France. Poster1 , Poster2 , Slides

Awards & Certifications

- Outstanding Winner in the Mathematical Contest in Modeling (MCM 2018) ([Certificate](#)) (rate< 1%)
- First Prize in the Chinese Mathematics Competitions (CMC 2017) ([Certificate](#)) (rate< 8%)
- First Prize in the Undergraduate Training Progress for Innovation & Entrepreneurship (2018) ([Certificate](#))
- Shenyang Eurasia Elite Mechanics Scholarship ([Certificate](#))
- TensorFlow Developer Certification, Completion Certification in AI Deep Learning Specialization

Other Activities

2022.06	Gretsi Signal and Image Processing Summer School (Nice, France);, (Certificate)
2022.07	Deep Learning for Medical Imaging Summer School (Montreal, Canada);, (Certificate)