

PERSONAL DETAILS

January 26, 1996 Birth

No.10 Zijing Student Apartment, Tsinghua University Address

(+86)17888830375PhoneHomepagejunshenxu.me

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EDUCATION

BSc. Engineering Physics

2014.08-2018.07

Tsinghua University

GPA:95/100, Ranking:1/143

BSc. Pure and Applied Mathematics (Second Degree)

2015.08-2018.07

Tsinghua University GPA:93/100

UGVR. 2017.06-2017.09

Stanford University

RESEARCH EXPERIENCE

Joint Reconstruction with Motion Correction in PET/MRI 2015.10-2016.11

Tsinghua University

Researched joint reconstruction and motion correction of PET/MRI

Designed and implemented the algorithm

The research achievements were submitted to ISMRM 2017

Wearable PET 2015.12-2016.05

Tsinghua University

Implemented a wearable PET device

Responsible for PET image reconstruction

Took part in Challenge Cup Competition of Science Achievement in Tsinghua and won Second Prize

Magnetic Resonance Imaging of the Fetal Brain

2016.02-2016.09

Tsinghua University

Researched motion correction and 3D reconstruction of multi-slice fetal brain MR images

Research on Attenuation Correction of PET/MRI

2016.05-2016.11

Tsinghua University

Estimated attenuation map based on T2 and UTE MR images using machine learning methods

The research achievements were submitted to ISMRM 2017 Supported by Tsinghua University Initiative Scientific Research Program

Ultra-low-dose PET Reconstruction

<u>201</u>7.06-2017.09

Stanford University

Predicted standard-dose PET images from low-dose PET images

SKILLS

Languages Dutch (mother tongue)

English (fluent)
German (fluent)

Software MATLAB, LATEX

SCHOLARSHIPS & AWARDS

2014—2015 National Scholarship

2015—2016 National Scholarship

The 34^{th} Challenge Cup Competition of Science Achievement in Tsinghua, Second Prize

PUBLICATIONS

- [1] Junshen Xu, Yibo Zhao, Kui Ying. Joint Reconstruction of Simultaneous PET/MR Imaging with Motion Correction Using a B-spline Motion Model. ISMRM 2017
- [2] Chang Gao, **Junshen Xu**, Bowen Fan, Jiajin Liu, Kui Ying. Comparison of UTE based Attenuation Correction Methods for simultaneous PET/MR Imaging of the Children's Brain. ISMRM 2017
- [3] Yilin Niu, Enhao Gong, **Junshen Xu**, John Pauly, Greg Zaharchuk. Improved Prediction of the Final Infarct from Acute Stroke Neuroimaging Using Deep Learning. ISC 2018 (submitted)
- [4] Yilin Niu, Enhao Gong, **Junshen Xu**, John Pauly, Greg Zaharchuk. Multi-scale Patch-wise 3D CNN for Ischemic Stroke Lesion Segmentation. ISLES 2017 (submitted)
- [5] Junshen Xu, Enhao Gong, John Pauly, Greg Zaharchuk. 200x Low-dose PET Reconstruction using Deep Learning. IEEE Trans. Med. Imaging (submitted)
- [6] Junshen Xu, Enhao Gong, Yilin Niu, Mehdi Khalighi, John Pauly, Greg Zaharchuk. Ultra-low-dose PET Reconstruction enabled by Deep Learning and Simultaneous PET/MR. ISMRM-SNMMI Co-Provided Workshop on PET/MRI 2017 (submitted)
- [7] Junshen Xu, Enhao Gong, Yilin Niu, John Pauly, Greg Zaharchuk. Evaluation on the Contribution of Multi-contrast MRI to Low-dose PET Reconstruction. ISMRM-SNMMI Co-Provided Workshop on PET/MRI 2017 (submitted)