Xiaoyu Yang

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College of Electronic and Information Engineering, Tongji University | Junior

EDUCATION

- Tongji University | Computer Science (Junior)   Sept 2016 to the present
  Major: image processing, medical image processing.
  GPA：4.4/5.0 (As of 19.7.25)

EXPERIENCE

- Pancreatic MRI Image Tumor Segmentation and Staging   May 2018 to the present
  CAD Research Center, Coll. of Electron. & Inf. Eng., Tongji Univ.
  Tutor: Yufei Chen
  Responsible for:
  - Model fusion & training of multi-modal diagnostic data
  - Data augmentation for small sample data
  - Target detection of pancreatic tumor area based on U-net

  Outcomes:
  - Publish the EI paper _Square Root Based Activation Function in Neural Networks_ by the first author
  - Apply for the national invention patent _A SQRT Activation Method Applied to Neural Networks_ as the first person

- Segmentation and 3D Reconstruction of Dental CBCT Images   Mar. 2018 to the present
  CAD Research Center, Coll. of Electron. & Inf. Eng., Tongji Univ.
  Tutor: Yufei Chen
  Responsible for:
  - Panorama generation of dental CBCT images
  - Tooth segmentation & pulp segmentation of dental CBCT images
  - 3D reconstruction & visualization of teeth and pulp based on MITK platform

  Outcomes:
  - Apply for the national invention patent _Single Tooth Extraction Method Based on Panorama_ as the first person
  - Apply for the national invention patent _A Segmentation Method of Single Tooth and Its Pulp Based on Gray Histogram_ as the second person

- Research and Application of Image Colorization Algorithm Based on GAN   May 2018 to Jun. 2019

  National university students' innovation and entrepreneurship project

  Captain in the three-person team, successfully completed

  Responsible for:

  ○ Build an FCN-based neural network for grayscale image coloring using pytorch

  ○ Study the feasibility method and gradient descent strategy of using GAN model

  ○ Build a sample website using Django

- 2018 ISICDM Pancreas Division Challenge   Aug. 2018

  CAD Research Center, Coll. of Electron. & Inf. Eng., Tongji Univ.

  Tutor: Yufei Chen

  Responsible for:

  ○ Interactive interface design & visual display based on MITK platform

HONORS & AWARDS

- Second prize in "Challenge Cup" intra-school selection competition   May 2019
- Third Prize in Shanghai Competition Area of National Mathematical Contest in   Oct. 2018
  Modeling, 2018
- Excellent undergraduates' scholarship of Tongji University, 2018   Apr. 2018
- Excellent student of Tongji University, 2018   Apr. 2018
- Second Prize in Shanghai Competition Area of National Mathematical Contest in   Oct. 2018
  Modeling, 2017
- Excellent undergraduates' scholarship of Tongji University, 2017   Apr. 2017
- Second Prize in Tongji Mathematical Contest in Modeling, 2017   Mar. 2017

MISCELLANEOUS

- Serving as a member of the Tongji University Student Union   Oct.2016 to Mar. 2018
- Participated in Tongji Summer Practice in 2018
- Volunteer service for the performance of the Starry Symphony Orchestra in 2016