Zhuang Kang

- 09 October 1999
- z.kang@uni-muenster.de
- +49 1722365557
- ZhuangKang
- ZhuangKang

About me

Guten Tag! I'm Zhuang Kang, a final-stage Master's student in Mathematics at the University of Münster. I specialize in mathematical image processing, optimization, and machine learning. Currently, I'm actively seeking industrial internship positions and thesis opportunities. Excited about contributing to practical innovations, I bring a strong foundation in mathematics and hands-on experience.

Education

Universität Münster	Münster
M. Sc. Mathematics	10/2021 - 09/2024
Sichuan University	Chengdu
B. Sc. Mathematics	09/2017 - 06/2021

Lectures

Machine Learning
Numerical optimization 1,0
Deep Neural Networks with PyTorch
Building Deep learning Models with TensorFlow
Advanced Numerical Methods and Applications 1,0
Mathematical Image Processing and Inverse Problems
Introduction to Computer Vision and Image Processing

Research projects

Object recognition with YOLOv8 ◇Website   12/2023-01/2024

Preprocessed the image data with Roboflow.

Trained the YOLOv8m model for car recognition.

Blood Cell Cancer recognition with ResNet50 ◇Website   12/2023-01/2024

Preprocessed the dataset consists of 3000+ images, including cropping, clustering and segmentation.

Applied ResNet50 to image classification tasks, achieved 99% accuracy.

Computed Tomography and Bregman method ◇Website   06/2023-12/2023

Applied Bregman iteration to address image restoration problem, including image denosing, CT reconstruction.

Summarized the development of iterative method in Computed Tomography.

Manifold optimization and image segmentation ◇Website   04/2022-01/2023

Applied Manifold optimization theory to enhance the Active Contour model for image segmentation.

Explored the completeness of the space of all closed curves.

Technical strength

Computer skills
Junior: Python, Tensorflow, openCV, Skimage, Pandas, Git, Docker, Google colab, Roboflow
Intermediate: Matlab, C++

Languages skills
Chinese(native), English(Fluent)

Honors and schoolarships

Full-Grant scholarship of WWU Münster   10/2021-09/2023

The 2 year scholarship is awarded to exceptionally talented students selected by the Masters Admission Committee. 3 students were selected from 24 applicants.

Student service

Tutor of Numerical Optimization   04/2023-09/2023

Conducted exercise courses.

Reviewed and corrected exercise sheets and Python codes.