

# Zhuang Kang

Email ◇ Website ◇ GitHub ◇ LinkedIn

## EDUCATION

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### Universität Münster

M. Sc. Mathematics

Münster

10/2021 - 09/2024

### Sichuan University

B. Sc. Mathematics

Chengdu

09/2017 - 06/2021

## LECTURES

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Lie groups 1,7

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

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### Blood Cell Cancer recognition with ResNet50 ◇Website

12/2023-01/2024

Applied ResNet50 to image classification tasks, achieved 99% accuracy in 3 epochs.

### 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 the iterative method in Computed Tomography.

### Manifold optimization and its application in 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.

## WORK EXPERIENCE

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### Tutor of Numerical Optimization

04/2023-09/2023

Conducted exercise courses.

Reviewed and corrected exercise sheets and Python codes.

### President of SCU Association Union

09/2019-08/2020

Manager of 12 associations in SCU Mathematical institute, responsible for their activity approval, financial management and year-end review.

### President of SCU Billards Association

09/2018-08/2019

Organized five university billards tournaments, each with more than twenty participants.

Raised all the funds for these five events through advertising sponsorships.

## HONORS AND SCHOLARSHIPS

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### **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.

## TECHNICAL STRENGTHS

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### **Computer skills**

Junior: Tensorflow, openCV, Python, Skimage,Panda, Git, Docker, Google colab, Matlab

Intermediate: AWS Cloud, C++

### **Languages skills**

Native: Chinese

Fluent: English

Intermediate: German