

# Sicheng Gao

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## EDUCATION

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<b>BEIHANG UNIVERSITY</b> <i>Institute of Artificial Intelligence/ School of Automation Science and Electrical Engineering</i>	Beijing, China	09/2021–present
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- M.S., Pattern Recognition and Intelligent Systems, under the supervision from [Prof. Baochang Zhang](#).

### Research Interests

Computer Vision and Machine Learning, including Image and Video Generation and Synthesis; 3D Scene Rendering; Medical Image Analysis; Network Compression.

### Publications

My name in bold, # indicates equal contribution.

**Sicheng, Gao#**, Xuhui, Liu#, et al. "Implicit Diffusion for Continuous Super-Resolution" (*CVPR 2023*).

**Sicheng, Gao#**, Feng, Yutang#, et al. "MagFormer: Hybrid Video Motion Magnification Transformer from Eulerian and Lagrangian Perspectives" (*BMVC 2022*).

**Sicheng, Gao**, et al. "1-bit WaveNet: Compressing a Generative Neural Network in Speech Recognition with Two Binarized Methods." (*ICIEA 2021*).

**Sicheng, Gao**, et al. "Variational Multimodal Learning for Fine-grained Lung Disease Classification" (*MICCAI 2023*, submitted)

Bohan, Zeng#, Xuhui, Liu#, **Sicheng, Gao#**, et al. "Coarse-to-Fine Face Animation with Diffusion Model" (*CVPRW 2023*, submitted).

Bohan, Zeng, Xuhui, Liu, **Sicheng, Gao**, et al. "LaDiffGAN: Training GANs with Diffusion Supervision in Latent Spaces", (*ICCV 2023*, submitted).

Bohan, Zeng#, Xuhui, Liu#, **Sicheng, Gao**, et al. "Identity Decoupling Learning for Face Animation" (*ACM MM 2023*, submitted)

Xuhui, Liu, **Sicheng, Gao**, et al. "Learning Variational Implicit Representation Function for Medical Image Segmentation" (*MICCAI 2023*, submitted)

Xuhui, Liu, **Sicheng, Gao**, et al. "Hybrid Spatio-Temporal Network for Face Forgery Detection" (*Neural Computing and Applications*, submitted).

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<b>CHINA AGRICULTURAL UNIVERSITY</b>	Beijing, China	09/2017-06/2021
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- B.S., Agricultural Mechanization and Automation, Overall GPA: **3.64/ 4**; Rank Top 3.

## WORKING EXPERIENCE

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<b>United-Imaging Research</b>	11/2022–present
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Computer Vision Researcher Intern, Supervised by [Prof. Dr. Xiantong Zhen](#)

<b>SenseTime Research – 3D Computer Vision (NeRF, Event Camera)</b>	01/2021-07/2021
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Computer Vision Researcher Intern, Supervised by [Dr. Yu Zhang](#) and [Dr. Dongqing Zou](#).

<b>Denso AI Lab</b>	10/2020-01/2021
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Computer Vision Researcher Intern; Intelligent Mobile Vehicle Electronic Technology Headquarters

## PROJECT EXPERIENCE

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Pattern Recognition Lab, Beihang University, Supervised by [Prof. Baochang Zhang](#)

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|--|------------------|
| • Model Quantization and Compression               | 10/2022- present |
| • Microvibration Video Motion Magnification        | 03/2022-08/2022  |
| • 1-bit WaveNet in Speech Recognition              | 09/2020-09/2021  |
| • Object Detection based on Binary Neural Networks | 09/2020-09/2021  |

Data Science Workshop, Supervised by [Prof. David Steurer](#), Department of Computer Science, Swiss Federal Institute of Technology in Zurich

Algorithms for (Sparse) Linear Regression and Experiments	05/2019-10/2019
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## TECHNICAL SKILLS

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- Be proficient with Python/Pytorch/Matlab, partial experience in Tensorflow/C++