

# Susu Hu

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## CURRENT POSITION

**National Center for Tumour Disease**, Dresden, Germany

**Doctoral Student**

2023 - Present

Geometry machine learning for surgical outcome prediction

## EDUCATION

**Dresden University of Technology**, Dresden, Germany

**Computational Modelling and Simulation, Master of Science**

2019 - 2023

- Areas of concentration: machine learning, computer vision, stochastic and probabilities, statistics, data visualisation
- Master thesis: Deep neural fields for non-rigid 3D reconstruction and registration

**Nanjing Agricultural University, China**

**Logistics Engineering, Bachelor of Science**

2009 - 2013

- Areas of concentration: computer science, natural science and engineering basics

## PROFESSIONAL EXPERIENCE

**National Center for Tumour Disease**, Dresden, Germany

**3D Deep Learning, Research Assistant**

2022 - 2023

- weakly supervised CT images segmentation

**Fraunhofer IPA**, Stuttgart, Germany

**2D/3D Signal Processing, Research Assistant**

2022

- Active learning and one-shot object tracking

**Fraunhofer IPMS**, Dresden, Germany

**Neural Network Quantization, Research Assistant**

2021 - 2022

- Intra-layer mixed quantization in convolutional neural networks

**Robotron Datenbank**, Dresden, Germany

**Software Developer, Working Student**

2021 - 2022

- Real-time multi-object tracking for industrial application

## AWARDS

Excellent students in artificial intelligence, *The School of Embedded Composite Artificial Intelligence (SECAI)*

2023

Merit student scholarship, *Nanjing Agricultural University*

2010

## PUBLICATIONS

Schulz, J., **Hu, S.**, Speidel, S., Seeling, P., Fitzek, F.

*"Negative Latency in Computer Vision: A Key to Efficient Edge Offloading"*

Global Communications Conference (GLOBECOM)

2024

- Vardar, A., **Hu, S.**, Jain, A., Mojumder, S., Shrivastava, S., De, S., & Kämpfe, T.  
*“Mixed intra layer In CNN quantization for CIM architectures”*  
*TinyML Summit* 2022
- Vardar, A., Zhang, L., **Hu, S.**, Jain, S. B., Mojumder, S., Laleni, N., ... & Kämpfe, T.  
*“Layer Sensitivity Aware CNN Quantization for Resource Constrained Edge Devices”*  
*International Conference on Soft Computing & Machine Intelligence (ISCM) IEEE* 2022