

# HAO WANG

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## EDUCATION

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**The University of Edinburgh**  
*MSc with Distinction in Informatics*  
Supervisor: Robert B. Fisher

2018 - 2019  
Edinburgh, UK

**Beijing University of Posts and Telecommunications**  
*B.Eng. in Telecommunication Engineering*  
Supervisor: Aidong Men

2014 - 2018  
Beijing, China

**Högskolan i Skövde**  
*Exchange Student in Informationsteknologi*  
Concentration: Operating Systems, System Administration

Sept. 2016 - Jan. 2017  
Skövde, Sweden

## ACADEMIC PROJECTS

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### Fine-grained 3D Face Reconstruction

Oct. 2019 - Mar. 2020

- Proposed a solution to construct large-scale fine-grained 3D data from RGB-D images
- Constructed a new dataset Fine-Grained 3D face (FG3D) with 200k samples
- Proposed Fine-Grained reconstruction Network (FGNet) for fine-grained 3D face geometry reconstruction

### Gender Identification from 3D Facial Surface Model

Feb. 2019 - Aug. 2019

*Dissertation for Master's degree*

- Proposed a novel method on 3D facial gender identification with machine learning & conformal mapping
- Evaluated the proposed method and obtained competitive performance (accuracy over 88%)

### Action Recognition Model with First-Person Videos

Jan. 2019 - Mar. 2019

- Evaluated third-person action recognition methods with first-person datasets
- Compared the differences between the third and first-person methods
- Proposed and studied a new model combining MobileNet and Two-stream Pyramid

### Image Super-Resolution with Convolutional Neural Network

Dec. 2017 - June 2018

*Dissertation for Bachelor's degree*

- Realized the subpixel-based image super-resolution method with pixel shuffle
- Tested the model on both image and video datasets

## RESEARCH EXPERIENCE

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### National Laboratory of Pattern Recognition, CASIA

Oct. 2019 - Present

*Research Intern*

Beijing, China

- Advisors: Xiangyu Zhu, Zhen Lei
- Projects: Fine-grained 3D Face Reconstruction

### Next Generation Internet Research Center, BUPT

May 2017 - Oct. 2017

*Undergraduate Research Assistant*

Beijing, China

- Advisor: Yang Liu
- Projects: Optimization on DASH-based video service in high-speed railway networks with stochastic methods; Network flow variation detection with mobile crowd sensing

## SKILLS

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**Programming Languages:** Python, MATLAB, C/C++, Java, VHDL, Verilog, Assembly Language

**Tools:** PyTorch, Tensorflow, OpenCV, Dlib

**Others:** Linux, Git, SQL, L<sup>A</sup>T<sub>E</sub>X, FPGA, Arduino, Raspberry Pi