

# Sue Yuxuan Si

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## EDUCATION

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Department of Information and Electronic Engineering, **Zhejiang University**, China Aug 2017 – Jul 2021  
B.E. of Engineering (expected in Jul 2021).

- **GPA:** 3.90/4.0 (87.8/100) **Ranking:** top 5% among 312 students
- **Core Courses:** Computer version (98/100), Computer organization and design (95/100), Complex variable function and integral transformation (94/100), Probability Theory and Mathematical Statistics (95/100), Java programming (95/100), Electronic circuit foundation (94/100), Data structure foundation (92/100), Electromagnetic Fields & Waves (91/100), Signal and Systems (91/100).

## RESEARCH EXPERIENCE

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**National University of Singapore (School of Computing)** Singapore  
Research Assistant to Professor Dong Jin Song Jul 2019 – Oct 2019

### Phishpedia: Identifying Phishing Target with Visual Explanation

- Proposed a visual analysis based approach to detecting phishing website, identifying its target, and explaining the reason with annotated regions on the screen shot Specific achievements.
- Automatically detected identity UI component in the screenshot, such as logo, via training the modified Yolov3 algorithm.
- Constructed and published two datasets for cyber-security and AI community. Namely, (1) 15,790 phishing webpages with their screenshot and html content, and (2) the labelled identity UI component in 35,090 webpage screenshots.

**Zhejiang University (Department of Information and Electronic Engineering)** Hangzhou, China  
Research Assistant to Professor Chunguang Li

### Hash learning based on deep neural network and its application in image retrieval

 Oct. 2019 – Present

- Proposed an end-to-end model for large-scale image retrieval using Learn to Deep Hash technology.
- Presented an equivalent continuous formulation to transform the discrete hashing problem into a continuous optimization problem without any relaxations.
- Treated the query points and database points in an asymmetric way with double-bit quantization.

**Zhejiang University (Department of Information and Electronic Engineering)** Hangzhou, China  
Research Assistant to Professor Cheng Zhuo Dec. 2019 – Mar. 2019

### Research on Efficient Convolutional Neural Network Search Method for Medical Image Segmentation

- By using the optimized Neural Architecture Search (NAS) method based on gradient descent, we presented a more effective neural network model for medical images segmentation.
- We searched the unit structure and the network-level architecture simultaneously to automatically construct a medical image segmentation model without tuning the network parameters.
- We improved the search space to make it possible to search the classic networks which include skip-connect units like U-Net.
- Our automatically constructed model ranks 40th in the Combined (CT-MR) Healthy Abdominal Organ Segmentation (CHAOS) challenge, exceeding the performance of the U-Net model.

## SELECTED AWARDS AND HONORS

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- Zhejiang University Third Class Scholarship 2018
- Zhejiang University First Class Scholarship 2019
- Provincial Government Scholarship of Zhejiang University 2019
- First Prize of Smart Car Competition (1/92) 2018
- Second prize of College Student Physics Academic Competition 2019
- Corporate Cooperation Award of 2019 Hangzhou Future Technology City-Smart City Construction Partner Competition (1/405) 2019

## ADDITIONAL INFORMATION

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### **Additional Professional and Extracurricular Experiences**

- Python, C/C++, MATLAB, Verilog, Java
- PyTorch, Tensorflow, LaTeX