# YIHUA HU

huy@ohsu.edu

## EDUCATION

**Oregon Health Science University** *September 2019 - Present*
Master in Computer Science and Engineering
GPA: 3.94/4

**South China Agricultural University** *September 2015 - June 2019*
Bachelor of Engineering
Overall Percentage: 89.42/100 (6/108)

## PUBLICATION

**Junhao Qiu, Yihua Hu, et al. Textile Defect Classification based on Convolutional Neural Network and SVM**

Published in The 2nd Artificial Intelligence on Fashion and Textile International Conference(AIFT 2019), and Recommended to *AATCC Journal of Research* as an excellent paper (has been accepted.)

## RESEARCH

**Hyperbolic space and Object detection**

- This project aims to implement an object detection algorithm (Mask R-CNN) in hyperbolic space on medical images.
- I read some papers about hyperbolic space and object detection, and now I'm learning the code for implementation.

**Textile Defect Classification based on Convolutional Neural Network and SVM**

- The project proposed a CNN framework based on improved AlexNet and SVM to detect and classify textile defects and achieved 99% accuracy.
- Responsibilities: completed and compared the performance of SVM and softmax.
- Through this research, I have learned how to read the literature and papers and extract and organize information from them, and master the skill of using Latex.

**Textile Image Recognition and Defect Detection**

- Responsibilities: designed and compared the performance of BP network and CNN for textile image feature extraction and applied softmax for classifying defects, and obtained the accuracy higher than 95%.
- This project developed into my undergraduate thesis. Through this research, I have understood the framework of TensorFlow.

**Comparison of user-based collaborative filtering algorithms**

- Responsibilities: implemented ALS algorithm on Spark and in serial, and compared the performance of these two implementations with the method on MapReduce.
- I completed a ACL format paper for this project. Through this research, I have mastered how to use clusters to solve big data problems and two big data programming frameworks: Spark and MapReduce.

## SKILL

- Python, Java, C, R
- HTML, CSS, JavaScript
- Latex, RStudio, TensorFlow, OpenCV, VS Code, Pytorch

## AWARD

2017-2018, Dean's List, South China Agricultural University

2017-2018, 2015-2016, Outstanding Volunteer, South China Agricultural University

2017-2018, 2016-2017, National Encouragement scholarship, Guangdong Provincial Education Department

2017-2018, 2016-2017, Campus Scholarship, South China Agricultural University

2016-2017, Advanced Individual in Sports, South China Agricultural University