

# CHEN LU

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## **Software Skills:**

Much Experience: MATLAB, C, LabView, Inventor. Some Experience: Python, Quartus.

## **Research Interest:**

Signal Processing, Machine Learning, Computer Vision and Data Analysis.

## **Education Background:**

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|-----------------------|--|
| Sept, 2019-Current    | International visiting student in University of California, Davis,<br>majoring in Electronic Engineering. GPA: <b>4.00/4.00</b>  |
| Sept, 2018-July, 2019 | Undergraduate in Wuhan University of Technology(WHUT),<br>majoring in Electronic Information Engineering. GPA: <b>3.939/5.00</b> |
| Sept, 2017-July, 2018 | Undergraduate in Wuhan University of Technology(WHUT),<br>majoring in Measurement and Control Technology.                        |
| Jun, 2017             | Graduate from Wuhan No.2 Senior High School.   |

## **Student Work Experience:**

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|-----------------------|--|
| Sept, 2017-July, 2019 | Commissary in charge of studies in the Department of Mechanical and<br>Electrical Engineering, WHUT                              |
| May, 2018-Sept, 2018  | Project team leader of the National Contest of <i>Internet+</i> Innovation and<br>Entrepreneurship of University Students (2018) |
| Sept, 2018-Sept, 2019 | Chair of training department of the WHUT Magic Association   |

## **Group Projects:**

### **Nondestructive Monitor of Moisture Content:**

**December 2018 - August 2019**

On team of 5, nondestructive testing experiments of vermicelli moisture content based on the capacitance method were designed to measure the capacitance of vermicelli samples with different moisture content. A polynomial regression model was finally obtained to predict the quality of the vermicelli product.

### **The Realistic Nature Role of Dragons:**

**February 2019**

On team of 3, on the basis of the Lotka Volterra differential equation, we built the Dragon Invasion Model to analyze the ecological impact brought by three hypothetical dragons. The Ant Colony Optimization algorithm was implemented to predict the required living area for the dragons. This thesis was for the Mathematical Contest in Modeling (MCM), 2019.

### **Speaker Recognition System:**

**February - March 2020**

On team of 2, implemented an automatic speaker identification system GUI on MATLAB using the MFCC method and the LBG algorithm for feature extraction.

### **Implementation of IEEE 802.11a (Wi-Fi):**

**February - March 2020**

On team of 3, implemented and tested part of the physical layer of IEEE 802.11a protocol using software defined radio NI USRP 2901 accompanied with Labview Communication System Design Suite.

## **Research Experience:**

In 2018, I worked in the research group of the New-energy Automobile Active Safety Control System in WHUT. Under the guidance of Dr. Yiyang Wei, I primarily studied the mechanism of the Electric Stability Control (ESC) system.

**Awards Obtained:**

- China National Scholarship, 2018.
- Third prize in the Hubei province, the Contest of *Internet+* Innovation and Entrepreneurship of University Students, 2018.
- Honorable Mention in the Mathematical Contest in Modeling (MCM), 2019.
- Silver award in Hubei *Shadow* close-up magic contest, 2019.
- Championship in the football league of Wuhan University of Technology, 2019.

(Last two are irrelevant to the research, yet mean magnificent to me)

**Publication:**

[1] Q. Fu, R. Wang, J. Xie, R. Lin, and C.Lu, A Non-destructive Monitoring of Vermicelli Moisture Based on Curved Surface Fitting by Capacitance Method, *Journal of Wuhan University of Technology*, Vol.41 No.8, August, 2019.