Chen Lu

21 Gongda Road, Wuhan, 430070, P.R.C. • chenlu2021app@163.com •

Education

Wuhan University of Technology (WHUT) Sept., 2017 - Present

Bachelor of Engineering, Electronic Information Engineering (Expected in Jun., 2021) **GPA: 3.95/5.0**

University of California, Davis (UC Davis) Sept., 2019 - Jun., 2020

Global Study Program **GPA: 3.92/4.0**

In-Progress Courses

Database and Information System, Fundamentals of Big Data

Publication

• Fu Q., 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.

Experience

Research Assistant, supervised by *Prof. Anna Zhu*, School of CS, WHUT Sept., 2020 - Present

• Using Keras API and TensorFlow, built the "One-shot scale invariant texture segmentation" deep learning pipeline from scratch; work including literature review, texture collage dataset generation, construction and evaluation of the model

Undergraduate Research Assistant, BRAT-Lab, UC Davis Jun., 2020 - Jul., 2020

• Used MATLAB to implement the K-means and LBG algorithms to cluster the Non-Orthogonal Multiple Access (NOMA) users based on their channel parameters; visualized the results using the Principal Component Analysis (PCA) algorithm

Intern Engineer, China Railway Siyuan Survey and Design Group CO. LTD. Aug., 2020 - Sept., 2020

• Used AutoCAD to implement the preliminary design of an integrated wiring schematic of the information systems in the Malaysia East Coast Railway project

• Translated and compiled a 72-page technical document regarding the design of the Malaysia East Coast Railway information system, which will be served as a reference for the official technical manual

Selected Course Projects

Automatic Speaker Recognition System (EEC201, WQ2020, UC Davis)

• Used MATLAB to implement the MFCC's method for feature extraction, implemented LBG algorithm for feature matching, and developed a concise user identification GUI based on the model; achieved an identification accuracy of 93.3%

Implementation of IEEE 802.11a (EEC165, WQ2020, UC Davis)

• Used Lab VIEW Communication System Design Suite to develop various subVI's including symbol timing recovery, frame synchronization, and OFDM modulator & demodulator; tested the system using NI USRP and achieved zero BER

Simulation Analysis of an IEEE 802.11-Based WLAN Ad-hoc Network (ECS152A, SQ2021, UC Davis)

• Used C++ to build a discrete time simulator to simulate and analyze the behavior of 802.11 CSMA/CA protocol; mainly responsible for coding the data structure Global Event List and analyzing the simulation results

Highlighted Achievements

• **China National Scholarship (3%),** Ministry of Education of the P.R.C. Aug., 2018

• **Academic Perfection,** UC Davis Jun., 2020

• **Honorable Mention (16%),** 2019 Mathematical Contest in Modeling Apr., 2019

• **Third Prize,** China College Students 'Internet Plus' Innovation and Entrepreneurship Competition Aug., 2018

• **Outstanding Student Cadre (8%),** School of Information Engineering, WHUT Oct., 2019

• **Silver Medal,** 'Shadow Cup' Close-up Magic Competition May, 2019

Technical Skills

• Software & OS: Git, Quartus, LabVIEW, Altium Designer, Wireshark, Multisim, AutoCAD, Inventor, Linux

• Programming Languages: Proficient in C, MATLAB; Familiar with Java, Python, SQL, HTML5, LaTeX

• Frameworks/Libraries: Numpy, TensorFlow, OpenCV, Matplotlib

Activities

Chair of Training Department, 'I Wonder' Magic Association, WHUT Sept., 2018 - Present

• Hold the weekly teaching session for about 20 people

Vice-Captain, Soccer team of the Department of Information Engineering, WHUT Jun., 2018 - Jun., 2019