Chen YANG
2800 SW Williston Road, Gainesville, Florida, 32608
Tel: 15004103560 · E-mail: cyang3@ufl.edu · WeChat: a4100yc

EDUCATION

University of Florida Sept. 2019- June 2021
M.S. in Electrical & Computer Engineering Gainesville, FL
GPA: 3.81/4.0

Shenyang Institute of Engineering Sept. 2014- July 2018
B.E. in Electronic Information Engineering Shenyang, Liaoning
GPA: 3.03/4.0

PROJECT EXPERIENCES

Brick Pattern Classification System based on ResNet50 Nov. 2020- Dec. 2020
Group Project | Machine Learning Gainesville, FL

- Preprocess the data set, and modify the image samples by bilinear interpolation
- Import the model parameters trained by the original author, use transfer learning tech to freeze the model's convolutional layer, add and train the custom fully connected layer to accelerate convergence
- Train the new fully connected layer, and use the divided test set to test. The final recognition accuracy is 97.5%

Research on LTE Information Transmission Technology Oct. 2020- Dec. 2020
Independent Project | Wireless Communication Gainesville, FL

- Designed and simulated an information transmission system using OFDM, and analyzed the signal features of each stage
- Explore the signal transmission characteristics in the AWGN channel and Rayleigh fading channel
- Calculate the change of system bit error rate (BER) under different signal-to-noise ratio (SNR) by Monte Carlo method

Analysis of Face Recognition Tech based on PCA and CNN Feb. 2020- Apr. 2020
Independent Project | Pattern Recognition Gainesville, FL

- Preprocess the LFW face set and use SVD function to compute eigenvalue of covariance matrices
- Use Principal Component Analysis (PCA) method to compute eigenfaces and reached 97% recognition accuracy
- Build a 8-layers Convolution Neural Network (CNN) with Tensorflow and reach 94% accuracy

A New Multi-Channel Environmental Temperature Detection Device based on ARM May 2017- Dec. 2017
1st Inventor | Utility Model Patent: CN206696670U Shenyang, Liaoning

- Design and use Proteus to simulate the control module of the detection device
- Achieve temperature information collection, heating, alarm and other functions with STM32f107 chip
- Expand the device hardware I/O ports to achieve multi-channel detection (up to 160 monitoring points)
- Completed the simulation and welding of the entire circuit with other members

Intelligent Granary Control System May 2017- Aug. 2017
Group Project | The Challenge Cup Sci. & Tech Competition: Provincial 3rd Prize Shenyang, Liaoning

- Implemented a circuit with AT89c51 to realize the control function and DHT11 to collect temperature and humidity information
- Completed the design and simulation of the display, linear stabilized power supply and control circuit of the system, using Multisim
- Design the device enclosure with other members using 3DsMax

MISCELLANEOUS

Research Interests : Computer Vision, Image Processing & Analysis, Machine Learning
Skills & Softwares : Python, MATLAB, Java, Multisim, Microsoft Office, Proteus
Languages : English (TOEFL102, CET-6), Chinese

HONOR AWARDS

Achievement Award Scholarship, University of Florida 2019-2020
Excellent Graduate, Shenyang Institute of Engineering 2018
Social Practice Advanced Individual 2015-2016
Third-Class Scholarship, Shenyang Institute of Engineering 2014-2015
Excellent Student Cadre, Shenyang Institute of Engineering 2014-2015