Zhikun Zhu

Address 69 Livingstone Road,

Southampton, UK, SO14 6WL

Date of Birth 16^{th} June 1995

Tel +44 (0)7563092591 Email zz1u17@soton.ac.uk

Education

2017-2018 MSc System Control and Signal Processing

University of Southampton, Southampton, UK

First term average - 76/100

Modules:

Machine Learning - 83 Adv Machine Learning - 85

Signal Processing - 72 Adv System & Signal Processing - 78

Control System Design - 75

Courseworks: Neural network and time series prediction - 100/100.

Subverting face detection - 70/100. Scene Recognition - 63/100.

Hybrid images - 84/100.

2013-2017 BEng Communication engineering

Southern University of Science and Technology, Shenzhen, China

Overall average score - 85/100

Major modules:

Communication Principles - 88 Probability and Statistics - 89

Wireless Communications - 94 Signals and Systems 93

Embedded System - 89 Data Communication and Networking - 85

Digital Circuit - 86 Digital signal processing - 83

Projects

April 2018 - Machine Learning Applied Cognitive Radio

Sep 2018 Final year project of postgraduate

This project trys to employ machine learning techniques to cognitive radios to enhance its performance in cooperative communication systems.

Technologies: MATLAB, machine learning, Wireless communication, Cooperative communication.

Dec 2016 - Full-duplex relay assisted cooperative communication system

June 2017 Final year project of undergraduate

This project is based on a cooperative communication system that contains a source, a relay, and a receiver. The relay is designed working in full-duplex mode, which mean the upload and download link are transmitting with the same frequency and time slot. The main problem is the strong self-interference versus weak message signal.

Technologies: MATLAB, Wireless communication, Full-duplex, Self-interference cancelation, Cooperative communication.

Oct 2016 - Rectenna energy harvesting system

May 2017 Student's Platform for Innovation and Entrepreneurship Training Program

The project's aim is to design a rectenna and rectifier filtering circuit to harvest the electromagnetic energy in the air to serve the sensor.

Technologies: MATLAB, Multisim, rectifier filtering, antenna design.

Jan 2016 - Asia Supercomputer Challenge 16

Mar 2016 A group competition

This competition ask groups to design a supercomputing system with the power constraint of 3000 watt. And optimize the system to some problems like Nature Language Processing using DNN. And our group won the prize of Excellence.

Technologies: Deep learning, DNN, Linux, parallel computing, computer architecture.

Work experience

May 2016 - Tatfook, Shenzhen, Guangdong, China

Oct 2016 Intern, software engineer

Accomplished a project that build and export 3D object on a website, which idea is inspired by OpenJSCAD. The project is part of a product that aims to inspire and teach children the basic of programming. The exported 3D files can be used in 3D Printing.

Technologies: Python, JavaScript, HTML5, CSS, Bootstrap, AngularJS, AJAX, jQuery, WebGL.

Adwards

- Excellent student scholarship in 2015-2016 and 2016-2017 academic year.
- Third-class Scholarship in 2015-2016 academic year.
- Prize of Excellence in ASC16 supercomputing challenge.

Skills

- Proficient in MATLAB, LATEX
- Familiar with Python, LabView, C/Java, Unix.
- Familiar with web development tools mentioned above.