Zhiming Huang

Email: huangzhiming@mail.nwpu.edu.cn • Personal Page: http://zhiming-huang.github.io

EDUCATION

Northwestern Polytechnical University, Xi'an, Shaanxi, China

- B.E. in Communication Engineering — Sep 2014 – Jun 2018
  - GPA: 87.16 / 100
  - Rank: 3 / 75

RESEARCH EXPERIENCE

University of Victoria, Victoria, British Columbia, Canada

- Undergraduate Research Internship, Department of Computer Science — Jun 2017 – Sep 2017
  - Project: **Clustering Multipath Components in Radio Channel Modelling**
  - Supervisor: Prof. Jianping Pan
  - Role: Conducted research on applying the methods from machine learning into the area of clustering paths in radio channel.

Northwestern Polytechnical University, Xi'an, Shaanxi, China

- Undergraduate Research Assistant, School of Electronics and Information — Mar 2016 – Mar 2017
  - Project: **Long-Range WIFI Communication for Solar-Powered Unmanned Aircraft Vehicle**
  - Supervisors: Prof. Ruonan Zhang and Prof. Bin Li
  - Role: Conducted field experiment, established and monitored the communication systems

Northwestern Polytechnical University, Xi'an, Shaanxi, China

- Undergraduate Research Assistant, School of Electronics and Information — Sep 2015 – Present
  - Project: **Intelligent Information Processing**
  - Supervisors: Prof. Yong Deng and Prof. Wen Jiang
  - Role: Conducted research on the information fusion theory, quantum information and game theory. Assisted in literature review

PUBLICATIONS & PRESENTATIONS

PUBLICATIONS

[1] Z. Huang, J. Pan, and R. Zhang, "Clustering Multipath Components Based on Multi-Snapshots Fusion", (In Progress)

[2] Z. Huang, J. Pan, and R. Zhang, "Modified Fuzzy C-means Algorithm for Clustering Multipath Components in Radio Channel Modeling", Sep 2017. (Ready to submit)

[3] Z. Huang, L. Yang, and W. Jiang, "Uncertainty Measurement with Belief Entropy on Interference Effect in Quantum-Like Bayesian Networks", *arXiv preprint*, arXiv. 1709.02844, Sep 2017. (Minor Revision submitted to *Applied Mathematics and Computation*)

[4] Z. Huang, W. Jiang, and Y. Tang "A New Method to Evaluate Risk in Failure Mode and Effects Analysis under Fuzzy Information," *Soft Computing*, ISSN. 1433-7479, DOI. https://doi.org/10.1007/s00500-017-2664-x, Jun 2017.

PRESENTATIONS

- Topic: National Innovation Program Defence for Medical Image Segmentation based on Evidence Theory and Its Accomplishment in FPGA — Jun 2017
  - Venue: Northwestern Polytechnical University, China
- Topic: Clustering Multi-Path Components in Radio Channel Modelling — Sep 2017
  - Venue: ESC building, University of Victoria, BC, Canada

CONTEST EXPERIENCE

National Undergraduate Innovation Training Program, — Jun 2015 – Jun 2016

- Designated as **Excellent Project**
  - Project: **Medical Image Segmentation based on Evidence Theory and Its Accomplishment in FPGA**
  - Team Members: Moxian Song, Zhiming Huang, Zichang He, Shuai Xu, Yubo Huang
  - Faculty Advisor: Prof. Wen Jiang
  - Moxian Song designed the algorithm with Shuai Xu and tested it in MATLAB.
    Zhiming Huang and Zichang He programmed the algorithm into FPGA
    Yubo Huang documented the test results and wrote reports.

2017 Interdisciplinary Contest In Modeling, held by COMAP — Jan 2016

- Designated as **Meritorious Winner**
  - Project: **Optimizing the Passenger Throughput at an Airport Security Checkpoint**
  - Team Members: Zhiming Huang, Yubei Lv, Zhenchao Guo

- Faculty Advisor: Prof. Wen Jiang
- Zhiming Huang established a Markov model using the queuing theory to simulate the passenger throughput. Yubei Lv programmed with python to simulate the model and drew figures with the obtained results Zhenchao Guo designed the structure of the paper and wrote the whole paper.

2016 Interdisciplinary Contest In Modeling, held by COMAP Feb 2016

- Designated as **Meritorious Winner**
  - Project: **A System Dynastic Model For Water Resources Analysis**
  - Team Members: Zhiming Huang, Zichang He, Yubo Huang
  - Faculty Advisor: Prof. Wen Jiang
  - Zhiming Huang established a system dynamic model to simulate the water resource situation in the future. Zichang He programmed with Vensim to simulate the model and drew figures with the obtained results Zhenchao Guo selected useful data from the Internet, designed the structure of the paper and wrote the whole paper.

COURSE DESIGNS

The Design and Implementation with FPGA For Digital Function Generator Based on DDS,

- Team Members: Litao Yan, Zhiming Huang Dec 2016
  - Yan's job: Designed the circuit and the whole framework.
  - Huang's job: Realized the DDS(Direct Digital Synthesis) at Altera DE0 Board using Verilog HDL.

The Design and Implementation with FPGA For Electronic Scale Based on HX711,

- Team Members: Litao Yan, Zhiming Huang Dec 2016
  - Yan's job: Designed the circuit and the whole framework, Equipped the FPGA with a LED screen and programmed it to show the weight.
  - Huang's job: Programmed FPGA by Verilog HDL to communicate with HX711.

AWARDS & SCHOLARSHIPS

- **Scholarship of Ministry of Industry and Information Technology of China**, Oct 2017
  For the outstanding performance in academic research. One of 3 undergraduate awardees in the university.
- **Outstanding Volunteering Service on 2017 IEEE Pacrim conference**, Aug 2017
  For the excellent volunteer service on the conference.
- **Scholarship of China Scholarship Council**, Jun 2017
  Full-tuition scholarship with stipend for undergraduate research internship at Uvic. One of 4 undergraduate awardees in the university
- **Scholarship of Ministry of Industry and Information Technology of China**, Oct 2016
  For the outstanding performance in academic research. One of 3 undergraduate awardees in the university.

CAMPUS ACTIVITIES

Microsoft Students Club, Northwestern Polytechnical University

- President Sep 2016 – Jun 2017
  - Conducted a hackthon activity among Xi'an city.
  - Organized technique trainings in the university.
  - Assisted Microsoft Research Asia in organizing a programming competition called "the beauty of programming".
  - Assisted Microsoft Research Asia in finding talents to participate MSRA Summer Camp.

SKILLS TEX, LATEX, XELATEX, MATLAB, Python, C, Verilog HDL,

INTERESTS Swimming, Computer Fixing.

[*CV compiled on 2017-11-11*]