# Zhiming Huang

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**EDUCATION**

**University of Victoria**, BC, Canada — Sep 2018 – Apr 2020
- M.S. in Computer Science, GPA: 8.75 / 9.
- Advisor: Dr. Jianping Pan
- Core Courses: Analysis of Algorithms (A+), Machine Learning Theory (A+), Advanced Optimization (A+), Operation Research (A).

**Northwestern Polytechnical University**, Shaanxi, China — Sep 2014 – Jun 2018
- B.Eng. in Communication Engineering, GPA: 87.39 / 100, Rank: 3/72.
- Core Courses: Information Theory (92), Principles of Communication (93), Computer Network (89), Probability and Statistics (93), Linear Algebra (95), Calculus (94).

**RESEARCH INTERESTS**

- **Wireless Communications and Mobile Networks**
  Machine learning & stochastic analysis in radio channel modeling, wireless caching systems, ad hoc networks, and crowdsourcing.

- **Statistical Learning and Optimization**
  Decision-theoretic online learning, multi-armed bandit problems, online decision making and control.

- **Statistical Inference and Decision Making**
  Bayesian networks, quantum probability theory, and information fusion techniques.

**PUBLICATIONS**

**JOURNAL PUBLICATIONS**

[1] A Framework of Multipath Clustering based on Space Transformed Fuzzy c-Means and Data Fusion for Radio Channel Modeling
**Z. Huang**, R. Zhang, J. Pan, Y. Jiang, and D. Zhai
To appear on *IEEE Transactions on Vehicular Technology (TVT)*, Oct 2019.

[2] Uncertainty Measurement with Belief Entropy on Interference Effect in Quantum-Like Bayesian Networks *(Citations: 20, ESI Highly Cited Paper)*
**Z. Huang**, L. Yang, and W. Jiang
*Applied Mathematics and Computation (AMC)*, Volume 347, Pages 417-428, Nov 2018.

[3] A New Method to Evaluate Risk in Failure Mode and Effects Analysis under Fuzzy Information *(Citations: 7)*
**Z. Huang**, W. Jiang, and Y. Tang
*Soft Computing (SOCO)*, Volume 22, Issue 14, Pages 4779-4787, Jul 2017.

**CONFERENCE PUBLICATIONS**

[1] Intelligent Caching Algorithms in Heterogeneous Wireless Networks with Uncertainty
B. Hu, Y. Chen, **Z. Huang**, N. Mehta, J. Pan
*In Proc. the 39th IEEE International Conference on Distributed Computing Systems (ICDCS)*, Jul 2019

[2] EQRC: An Enhanced QR Code-based Secure E-coupon Transaction Framework
R. Liu, J. Song, **Z. Huang**, J. Pan
*In Proc. the 53rd IEEE International Conference on Communication (ICC)*, May 2019.

**IN PROGRESS**

[1] **Z. Huang**, Y. Xu, J. Pan, TSOR: Thompson Sampling-based Opportunistic Routing
*Submitted to ACM MOBIHOC 2020* Dec 2019.

[1] **Z. Huang**, Y. Xu, B. Hu, Q. Wang, J. Pan, on combinatorial multi-arm bandits and Thompson sampling algotithms
*submitted to a conference for double-blind review*.

[2] **Z. Huang**, B. Hu, J. Pan, on caching problems with delayed feedback
*To be submitted*.

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| **RESEARCH PROJECTS** | ▪ **Sequential Learning for Opportunistic Routing** | |
| | Advisor: Dr. Jianping Pan | Sep 2018 – Oct 2019 |
| | ▪ **Sequential Learning in Wireless Caching Systems** | |
| | Advisor: Dr. Jianping Pan | Sep 2018 – Oct 2019 |
| | ▪ **Automatic Clustering in Radio Channel Modeling** | |
| | Advisors: Dr. Ruonan Zhang and Dr. Jianping Pan | Sep 2017 – Jun 2018 |
| | ▪ **Long-range Wireless Communication System** | |
| | Advisors: Dr. Ruonan Zhang and Dr. Bin Li | Sep 2016 – Jun 2018 |
| | ▪ **The Quantum Probability Theory in Bayesian Networks** | |
| | Advisors: Dr. Wen Jiang and Dr. Yong Deng | Sep 2016 – Jun 2017 |
| | ▪ **The Application of Information Fusion Techniques in Fault Diagnosis and Decision Making** | |
| | Advisors: Dr. Wen Jiang and Dr. Yong Deng | Sep 2015 – Jun 2016 |

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| **AWARDS & SCHOLARSHIPS** | ▪ **IEEE Pacific Rim Wu-Sheng Lu Graduate Scholarship**, | Nov 2019 |
| | For excellent academic performance. | |
| | ▪ **ICDCS 2019 Travel Grant Award**, | Jun 2019 |
| | For graduate students and post-doctoral researchers to participate in ICDCS 2019. | |
| | ▪ **UVic Graduate Award**, | Jun 2019 |
| | For the outstanding academic performance during graduate study. | |
| | ▪ **Mitacs Graduate Fellowship**, | Sep 2018 |
| | For former Globalink research interns who return to Canada for research-based graduate studies at eligible Mitacs academic partners. | |
| | ▪ **The Best Final Thesis Award**, | Jun 2018 |
| | For the outstanding final thesis, top 5% undergraduate awardees in the university. | |
| | ▪ **The Excellent Graduate Award**, | Jun 2018 |
| | For the outstanding academic performance during undergraduate study, top 5% in the university. | |
| | ▪ **Scholarship of Ministry of Industry and Information Technology of China**, | Oct 2017 |
| | For the outstanding performance in academic research, top 0.01% in the university. | |
| | ▪ **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, top 0.01% in the university. | |

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| **PROFESSIONAL ACTIVITIES** | **PAPER REVIEWER** | |
| | ▪ IEEE INFOCOM | |
| | **MEMBERSHIP** | |
| | ▪ ACM Student Member | Sep 2019 – Now |
| | ▪ IEEE Student Member | Apr 2019 – Now |

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| **TEACHING EXPERIENCE** | ▪ **Teaching Assistant in CSC361: Computer Communications and Networks**, | Sep 2019 – Dec 2019 |
| | ▪ **Consultant in UVic Computer Science Assistance Centre**. | Jan 2019 – Aug 2019 |

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| **REFERENCES** | ▪ **Dr. Jianping Pan** |
| | Professor of Computer Science |
| | University of Victoria, BC, Canada |
| | pan@uvic.ca |
| | ▪ **Dr. Ruonan Zhang** |
| | Professor of Electronics and Information |
| | Northwestern Polytechnical University, Shaanxi, China |
| | rzhang@nwpu.edu.cn |
| | ▪ **Dr. Wen Jiang** |
| | Professor of Electronics and Information |
| | Northwestern Polytechnical University, Shaanxi, China |
| | jiangwen@nwpu.edu.cn |