# 赵子健 LONGINO

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#### 教育背景

香港科技大学(香港清水湾校区)土木工程专业(科学计算方向)博士

2024.09 至今

导师: 李森

主要研究方向:多智能体 & 多动作强化学习、深度学习、智慧交通; GPA: 3.9/4.2

中山大学(广州校区)计算机科学与技术专业(基础学科拔尖计划)本科 2020.09 - 2024.07

导师:朱光旭(深圳大数据研究院),黄凯,高成英,刘宁

主要研究方向: Wi-Fi 感知、音乐信息检索、机器人强化学习; GPA: 4.0/5.0 (专业前 10%)

- 2021 年由电子信息类 (深圳校区) 转入计算机科学与技术专业 (广州校区)
- 专业排名第一:程序设计,编译原理,分布式系统,嵌入式系统,复变函数,数学分析,高等代数,数据结构与算法,概率论与数理统计,离散数学
- 课程项目: https://gitee.com/zzj\_rs/undergraduate-programs

### 实习经历

似然实验室 产学研项目学生

2024.02 - 2024.08

深圳大数据研究院(香港中文大学深圳)访问本科生

2023.08 - 2024.08

#### 出版物

- [1] Zitao Zhang, Yuhong Huang, **Zijian Zhao**, Zhenshan Bing, Chenglin Cai, Alois Knoll and Kai Huang\*, "Autonomous Locomotion of a Rat Robot Based on Model-free Reinforcement Learning", 2024 IEEE International Conference on Advanced Robotics and Mechatronics (ICARM), 2024
- [2] Xiao Liang(导师), **Zijian Zhao**, Weichao Zeng, Yutong He, Fupeng He, Yiyi Wang, Chengying Gao\*, "PianoBART: Symbolic Piano Music Understanding and Generating with Large-Scale Pre-Training", 2024 IEEE Conference on Multimedia Expo (ICME), 2024 (**oral**)
- [3] **Zijian Zhao**, Tingwei Chen, Fanyi Meng, Hang Li, Xiaoyang Li, Guangxu Zhu\*, "Finding the Missing Data: A BERT-inspired Approach Against Package Loss in Wireless Sensing", 2024 IEEE International Conference on Computer Communications (INFOCOM) DeepWireless Workshop, 2024
- [4] Zitao Zhang, Yuhong Huang, **Zijian Zhao**, Zhenshan Bing, Alois Knoll and Kai Huang\*, "A Hierarchical Reinforcement Learning Approach for Adaptive Quadruped Locomotion of a Rat Robot," 2023 IEEE International Conference on Robotics and Biomimetics (ROBIO), 2023 (最佳论文奖入围)
- [5] Zitao Zhang\*, Yuhong Huang, **Zijian Zhao**, Zhenshan Bing, Kai Huang, "Autonomous Locomotion of a Rat Robot Based on Reinforcement Learning", 2023 China Intelligent Robotics Annual Conference (CCF CIRAC), 2023
- [6] **Zijian Zhao**, Sen Li\*, "Discriminatory Order Assignment and Payment-Setting of On-Demand Food-Delivery Platforms: A Multi-Action and Multi-Agent Reinforcement Learning Framework" (在审, Transportation Research Part C: Emerging Technologies (TR\_C))
- [7] **Zijian Zhao**, Sen Li\*, "Multi-Action and Multi-Agent Reinforcement Learning for Discriminatory Order Assignment and Payment Setting on Food-Delivery Platform" (在审, Symposium of the European Association for Research in Transportation (hEART), 2025)
- [8] **Zijian Zhao**, Tingwei Chen, Zhijie Cai, Xiaoyang Li, Hang Li, Qimei Chen, Guangxu Zhu\*, "CrossFi: A Cross Domain Wi-Fi Sensing Framework Based on Siamese Network" (在审, IEEE Internet of Things Journal (IOT))
- [9] **Zijian Zhao**, Zhijie Cai, Tingwei Chen, Xiaoyang Li, Hang Li, Qimei Chen, Guangxu Zhu\*, "KNN-MMD: Cross Domain Wireless Sensing via Local Distribution Alignment" (在审, IEEE Transactions on Mobile Computing (TMC))
- [10] **Zijian Zhao**, Tingwei Chen, Fanyi Meng, Zhijie Cai, Hang Li, Xiaoyang Li, Guangxu Zhu\*, "LoFi: Vision-Aided Label Generator for Wi-Fi Localization and Tracking" (在审, IEEE Wireless Communications Letters (WCL))
- [11] **Zijian Zhao\***, "Let Network Decide What to Learn: Symbolic Music Understanding Model Based on Large-scale Adversarial Pre-training", (在审, ACM International Conference on Multimedia Retrieval (ICMR), 2025)
- [12] Haolong Chen, Hanzhi Chen, **Zijian Zhao**, Kaifeng Han\*, Guangxu Zhu\*, Yichen Zhao, Ying Du, Wei Xu, Qingjiang Shi, "An Overview of Domain-specific Foundation Model: Key Technologies, Applications and Challenges" (在审, Science China Information Sciences (SCIS))
- [13] Tingwei Chen, Yantao Wang, Hanzhi Chen, **Zijian Zhao**, Xinhao Li, Nicola Piovesan, Guangxu Zhu\*, Qingjiang Shi, "Modelling the 5G Energy Consumption using Real-world Data: Energy Fingerprint is All You Need" (在审, IEEE

Wireless Communications Letters (WCL))

- [14] Tingwei Chen, Jiayi Chen, **Zijian Zhao**, Haolong Chen, Liang Zhang\*, Guangxu Zhu\*, "First Token Probability Guided RAG for Telecom Question Answering" (在改, 已上传 arxiv)
- [15] **Zijian Zhao**, Fanyi Meng, Hang Li, Xiaoyang Li, Guangxu Zhu\*, "Mining Limited Data Sufficiently: A BERT-inspired Approach for CSI Time Series Application in Wireless Communication and Sensing" (待投稿, 已上传 arxiv)

#### 专利

- [1] **赵子健**,朱光旭,陈琪美,韩凯峰,"基于少样本学习的模型对对象识别的方法及相关设备"(深圳大数据研究院,专利号: ZL202411074110, 2024)
- [2] **赵子健**, 韩凯峰, 陈琪美, 朱光旭, 李晓阳, 李航, "信道状态信息恢复方法及装置、设备、存储介质"(深圳大数据研究院, 专利号: ZL2024102321250, 2024)
- [3] **赵子健**,朱光旭,韩凯峰,李晓阳,李航,"基于少样本学习的模型对数据分类的方法及相关设备"(深圳大数据研究院,专利申请号: 2024108392137, 2024)
- [4] **赵子健**,朱光旭,沈超,史清江,韩凯峰,"人员检测方法、装置、电子设备以及存储介质"(深圳大数据研究院,申请号:2024105419689,2024)
- [5] 黄凯 (导师), 张子韬 (导师), **赵子健**, 陶若怡, "一种基于强化学习的小型仿生鼠机器人的运动控制方法" (人工智能与数字经济广东省实验室 (广州) & 中山大学, 申请号: 2023116499786, 2023)

## 专业服务

- 协会会员: CCF 学生会员 (免费授予)
- TPC 成员: IEEE WCNC 2024-2025, IEEE PIMRC 2024
- 审稿人: ACL 2025, IEEE ICME 2024-2025, IEEE ICASSP 2024-2025, IEEE IJCNN 2025, IEEE WCNC 2024-2025, IEEE PIMRC 2024, IEEE SMC 2023, IEEE MTAP

#### 专业技能

- 熟练掌握: C/C++ (CCF-CSP:320, 排名前 0.8%), Python, Matlab, Pytorch
- 熟悉: MySQL, Git, Linux, ESP32英语: 雅思 6.5, 六级 561, 四级 605

## 所获荣誉

- 1、博士期间:
- (1) 校级奖项:
  - 香港科技大学红鸟博士奖学金(奖金: 40.000 港币)
- 2、本科期间:
- (1) 国际级奖项:
  - 美国大学生数学建模竞赛 M 奖 (担任队长、指导人)
  - 亚太地区大学生数学建模竞赛二等奖 (担任队长)
  - ITU AI/ML 5G 能耗建模大赛二等奖(排名 2/776, 奖金 3,000 法郎, 导师: 朱光旭教授)
  - IEEE ROBIO 2023 仿生学最佳论文入围奖
- (2) 国家级奖项:
  - 华为 WiFi 感知大赛三等奖(排名 6/287, 奖金 20,000 元人民币, 导师:朱光旭教授、李晓阳博士、李航博士)
  - 全国大学生算法设计与编程挑战赛铜奖
  - 传智杯全国大学生 IT 技能大赛三等奖
- (3) 省级奖项:
  - 全国大学生数学竞赛省一等奖
  - 全国大学生统计建模竞赛省二等奖 (导师: 梁琦教授、王如玉教授)
  - 全国大学生数学建模竞赛省三等奖(担任队长)
  - 华教杯全国大学生数学竞赛省三等奖
- (4) 校级奖项:
  - 中山大学一等奖学金(奖金4,000元人民币)
  - 中山大学程序设计新手赛一等奖 (担任队长)
  - 中山大学电子设计创意大赛优胜奖 (担任队长)
  - 中山大学职面未来求职大赛三等奖 & 优秀简历奖 (奖金 300 元人民币)
- (5) 其他:
  - 似然实验室菁英奖学金(奖金5,000元人民币)