Neiwen Ling

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EDUCATION

- The Chinese University of Hong Kong 08/2018-07/2022
  Major: Information Engineering（Ph.D., full-time, supervised by Guoliang Xing）
- Northwestern Polytechnical University 09/2014-07/2018
  Major: Electronics and Information Engineering（four-year, full-time, Bachelor's Degree）

RESEARCH INTERESTS

Internet of Things, Edge AI, Edge Computing, Real-time Deep Learning, Real-time Scheduling, Deep Learning System

RESEARCH EXPERIENCE

- Shenzhen Institute of Artificial Intelligence and Robotics for Society 11/2019-01/2020
  Visiting Ph.D. student
- The Department of Information Engineering, The Chinese University of Hong Kong 08/2022-Present
  Postdoctoral Fellow

PUBLICATIONS

- **N. Ling**, X. Huang, Z. Zhao, N. Guan, Z. Yan and G. Xing, "BlastNet: Exploiting Duo-Blocks for Cross-Processor Real-Time DNN Inference," in Proceedings of the 20th Conference on Embedded Networked Sensor Systems
  SenSys 2022 (conditionally accepted subject to shepherding), 52/209=24.88%

- **N. Ling**, K. Wang, Y. He, G. Xing, and X. Daqi, "RT-mDL: Supporting real-time mixed deep learning tasks on edge platforms," in Proceedings of the 19th Conference on Embedded Networked Sensor Systems
  SenSys 2021, 25/139=17.98%

- Z. Zhao, K. Wang, **N. Ling**, and G. Xing, "Edgeml: An automl framework for real-time deep learning on the edge," in Proceedings of the International Conference on Internet-of-Things Design and Implementation
  IoTDI 2021, 19/74=25.7%

- Z. Zhao, Z. Jiang, **N. Ling**, X. Shuai, and G. Xing, "Ecrt: an edge computing system for real-time image-based object tracking," in Proceedings of the 16th ACM Conference on Embedded Networked Sensor Systems
  SenSys 2018 Demo

PROFESSIONAL SKILLS

- Programming Language: Python, C/C++ Language, Verilog HDL, Assembly Language
- Development of NVIDIA Jetson TX2, NVIDIA AGX Xavier, FPGA, Arduino, 51 SCM, STM32F1, STM32F4
- Programming Software: MATLAB, CodeBlocks, Visual Studio, Quartus II, Arduino IDE, Keil

SCHOLARSHIP & ACTIVITIES

- N2Women Young Researcher Fellowship 11/2021
- Postgraduate Scholarship 08/2018-07/2022
- Undergraduate Excellent Graduation Project (5/235) 06/2018
- Second-class in Zhongya Huanbao Scholarship 09/2017
- First-class scholarship of Northwestern Polytechnical University 09/2017&2016
- First-class scholarship of School of Marine Science and Technology, NWPU 09/2015
- Deputy Secretary of Study Department, NWPU Student Union 09/2015-07/2016
- Team leader of the Technology Group of Lenovo Idea Elite Club 08/2015-03/2016

COMPETITIONS & HONORS

- The 6th National Marine Vehicle Design and Manufacture 08/2017
  National 1st prize, team leader, the sea-air unmanned aerial vehicle with two mechanisms of navigating
- National Undergraduate Electronics Design Contest 08/2017
  Provincial 3rd prize, adaptive filtering
- "MathorCup" Mathematical Modeling Contest 05/2017
  National 2nd prize, Dynamic Prediction and Control Analysis of Ironmaking Based on Neural Network
- Interdisciplinary Contest in Modeling 01/2017
  International 2nd prize, Analysis of the Airport's Security Check Mechanism Based on Queuing Theory
- Honorable Mentioned of BLCUMUN Conference 03/2016
- "NWPU Publisher Cup" NWPU Mathematical Modeling Contest
  First prize, Analysis of Eight Queens in Different Dimensions Based on Backtracking Algorithm 05/2016
  Second prize, Ebola Virus Transmission Problem 05/2015
- Second place in 5th Northwestern Polytechnical University Elite Debate Race 05/2015
- Position Paper award in Northwest Model United Nations Conference 05/2015

PROFESSIONAL SERVICES

- Organizer
  N2Women Meeting in SenSys 2021
- Invited reviewer
  IEEE Transactions on Mobile Computing (TMC)

TEACHING EXPERIENCE

- Teaching Assistant
  ENGG1100: Introduction to Engineering Design, 2018 Fall, CUHK
  IERG4230: Introduction to Internet of Things, 2019 Spring, CUHK
  ENGG1110: Problem Solving by Programming, 2019/2020/2021 Fall, CUHK
  IERG2602: Engineering Practicum, 2020/2021 Spring, CUHK