XUE Boyang

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Email: byxue@se.cuhk.edu.hk; beyondhsueh1024@gmail.com.
Personal Website: https://amourwaltz.github.io.   GitHub: https://github.com/AmourWaltz.
Research Interests: Natural Language Processing, Machine Learning, Speech Recognition.

Education

The Chinese University of Hong Kong, Hong Kong SAR, China.	**Aug. 2021 - Present**
Ph.D. Student Dept. of System Engineering and Engineering Management.	
Huazhong University of Science and Technology, Wuhan, China.	**Sep. 2016 - Jun. 2020**
B.Eng. School of Artificial Intelligence and Automation, Excellent Class.	

Main Publications

Published as First Author:

- Bayesian Neural Network Language Models for Speech Recognition. *IEEE/ACM Transactions on Audio, Speech, Language Processing (TASLP), vol. 30, page. 2900-2917, 2022.*
- Bayesian Transformer Language Models for Speech Recognition. *in IEEE International Conference of Acoustics, Speech Signal Processing (ICASSP), 2021, page. 7378–7382.*
- Deep Learning based Patient-Specific FHR Detection System on FECG. *Chinese Patent Granted, 2020, CN112826513B.*

Research Experiences & Responsibilities

Research Intern in HUAWEI Noah's Ark Lab, Shenzhen.	**Aug. 2023 - Present**
Project: Knowledge & Hallucinations in LLMs.	**Advisor:** *Prof. WONG Kam-Fai*.

Research Intern in HUAWEI Noah's Ark Lab, Shenzhen.	**Nov. 2022 - Aug. 2023**
Project: Factual Consistency for Knowledge-based Dialogue.	**Advisor:** *Dr. Weichao WANG*.

Research Assistant and Ph.D. Student in HCCL Lab, CUHK.	**Sep. 2020 - Aug. 2022**

Research Topic: Neural Language Models.   **Advisor:** *Dr. Jianwei YU* and *Prof. Xunying LIU*.
Project 1: Domain Adaptation of Language Models for Elderly Speech Recognition.
Project 2: Uncertainty Modeling in Neural Network Language Models.

Research Intern in IMDS Lab, HUST.	**Sep. 2019 - Jun. 2020**

Project: Fetal Heart Rate Detection on FECGs.   **Advisor:** *Dr. Cheng CHENG* and *Prof. Ye YUAN*.

Team Leader in Intelligent Robotics Team, HUST.	**Dec. 2017 - Aug. 2019**

Project: Robotics and Intelligent Cars Development.   **Advisor:** *Prof. Dingxin HE*.

Awards & Honors

- Excellent Bachelor Thesis, Excellent Student Cadre, Excellent Graduate Student.
- National Grand Prize in the *14th NXP Cup National University Intelligent Car Race.*
- First Prize in the *13th NXP Cup National University Intelligent Car Race.*
- Second Prize in the *19th Asia and Pacific Mathematical Contest in Modeling* (APMCM).

Skills & Extracurricular Activities

- Excellent communication, leadership, team spirit, and English writing skills.
- Served as a part-time author, skilled in piano, tennis, singing, modern dance, etc.