

Pingwei Sun

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Education

The Hong Kong University of Science and Technology

Master of Science in Big Data Technology

Hong Kong, China

Sep 2023 - Jul 2024

- I am now an incoming student.

Northeastern University

Bachelor of Engineering in Artificial Intelligence

Liaoning, China

Sep 2019 - Jul 2023

- **GPA:** 90.23/100
- **Courses:** Probability Theory and Statistics, Discrete Mathematics, Optimization Theory, Data Structure, Algorithm Design, Computer System, Machine Learning, Pattern Recognition, Deep Learning, Natural Language Processing
- **Extracurricular Activities:** Leader of the official visual studio of the Northeastern University

Skills

Programming Python, C/C++, Verilog, Vivado, Linux, Git
Soft Skills Time Management, Teamwork, Documentation
Language IELTS 7.0 (Aug 2022)

Experience

Tensor Lab, OPPO Research Institute

Algorithm Engineer (Intern)

Beijing, China

Mar 2023 - Jun 2023

- **High-performance deployment:** Improve Bert-like pretrained models' inference performance on smartphones. Investigate the landscape of LLM's deployment on smart devices. The project of LLM on smartphones has been approved for establishment.
- **Efficient matrix multiply kernel:** Optimize the matrix multiply kernel for the self-developed framework.

School of CSE, Northeastern University

Teaching Assistant

Liaoning, China

Sep 2022 - Jan 2023

- **Virtual Environment:** Build the docker image needed for the experiment and make it accessible through the web page.
- **Guidebook:** Design experiment content and scoring criteria (**refer to repo**).
- **Q&A:** Provide lecture and instruction to students in class.

Projects

High-performance CPU design and AI application based on MIPS

School of CSE, NEU

Liaoning, China

Jan 2023 - Jun 2023

- A dual-issue six-stage pipeline CPU based on MIPS was built, and it cooperates with a CNN acceleration core to process the MINIST data. All designs are coded in **Verilog** and implemented on **FPGA** board. It is also my graduation thesis, which received excellent reviews from professors.

BERT based Sentiment Classification

NEU NLP-Lab

Liaoning, China

Jun 2022 - Aug 2022

- Based on the BERT model, this project enhances the performance of the model on extremely unbalanced data sets through a variety of fine-tuning methods and a **contrastive learning** task.

Fundus Image Analysis based on Deep Learning Methods

NEU MIIC-Lab

Liaoning, China

May 2022 - Jul 2022

- This project includes several sub-modules of the diabetic retinopathy diagnosis system, including macular positioning, vascular segmentation, and grading. Models like YOLO, U-Net, and Efficientnet are applied to analyze fundus images and assist in the diagnosis of DR.

Honors (selected)

2020	National Scholarship , Northeastern University	Liaoning, China
2020	First-class Scholarship , Northeastern University	Liaoning, China
2021	Outstanding Student Journalist , Northeastern University	Liaoning, China
2022	Third Prize in "Loongson Cup" , National Student Computer System Capability Challenge	Beijing, China

References available upon request.