陳亮錡
Liang-Chi Chen

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🏠 https://chi-0828.github.io/LCCHEN.github.io/

EDUCATION

- **National Cheng Kung University (NCKU)**
  - MS, **Computer Science** and Information Engineering
  - Sept. 2022 - present

- **National Chung Cheng University (CCU)**
  - BS, **Computer Science** and Information Engineering
  - Sept. 2018 - Jun. 2022

RELEVANT EXPERIENCE

- **Research intern**
  - Institute of Information Science, Academia Sinica. | 2022/07 - 2022/08 (Summer)
  - Storage, Non-volatile memory, Computer Architecture / System

- **Software engineering intern**
  - Patere | 2021/07 - 2021/08 (Summer)
  - Computer vision application, DL, Python, C++, Tensorflow, OpenCV

PUBLICATION

RESEARCH INTEREST

- **Embedded system, memory/storage system**
- **Processing-in-memory**

PROJECT

- **Sequencing on processing-in-memory system**
  - Running state-of-the-art RNA quantification software "kallisto" on UPMEM DPU system
  - https://github.com/chi-0828/RNA-Abundance-Quantification-on-UPMEM

- **Sanitization design on NAND flash**
  - SSD simulator implementation in C++

- **longphase**
  - Assist in implementation of phasing software
    - Parsing module and multi-threading parallelism
    - Build configuration tool
    - https://github.com/twolinin/longphase

AWARD

- **Presidential award (rank 1 in class), second semester of the 108 academic year in CCU CSIE**

Conference papers:

1. **Efficient Sanitization Design for LSM-based Key-Value Store over 3D MLC NAND Flash**
   <u>Liang-Chi Chen</u>, Shu-Qi Yu, Chien-Chung Ho, Wei-Chen Wang, Yung-Chun Li
   The 38th ACM/SIGAPP Symposium On Applied Computing (SAC), March 27-31, 2023. (to be appear)

2. **RNA-seq Quantification on Processing in memory Architecture: Observation and Characterization**
   <u>Liang-Chi Chen</u>, Shu-Qi Yu, Chien-Chung Ho, Yuan-Hao Chang, Da-Wei Chang, Wei-Chen Wang, Yu-Ming Chang
   The 11th IEEE Non-Volatile Memory Systems and Applications Symposium (NVMSA), August 23-25, 2022
   https://doi.org/10.1109/NVMSA56066.2022.00014

Journal papers:

1. **LongPhase: an ultra-fast chromosome-scale phasing algorithm for small and large variants**
   Jyun-Hong Lin, <u>Liang-Chi Chen</u>, Shu-Chi Yu, Yao-Ting Huang,
   Bioinformatics, 2022, 38.7: 1816-1822.
   https://doi.org/10.1093/bioinformatics/btac058