TAN Weile

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EDUCATION

- **Hong Kong University of Science and Technology** — Hong Kong SAR
  Doctor of Philosophy in Computer Science and Engineering — *Sep 2024 - Current*

- **Hong Kong University of Science and Technology** — Hong Kong SAR
  Bachelor of Science in Data Science and Technology; CGA: 3.77; Major CGA: 3.84 — *Sep 2020 - Jun 2024*

- **University of California, Santa Barbara** — Santa Barbara, USA
  HKUST School of Engineering Undergraduate Outbound Exchange Program; GPA:4.0 — *Jan 2023 - March 2023*

RESEARCH EXPERIENCE

- **Undergraduate Research Opportunities Program (UROP1100H)** — HKUST
  Project: Knowledge Discovery over Database   Supervisor: **Prof. Raymond Chi-Wing Wong** — *Aug 2022 - Sep 2024*
  - An research project about enhancing the performance of session-based recommendation systems.
  - Our research paper has been accepted by ICDM2024 as a regular paper.

- **CSE/CPEG Final Year Project (COMP4981)** — HKUST
  Project: Human-AI Collaboration in Data Science   Supervisor: **Prof. Xiaojuan MA** — *Apr 2023 - Aug 2024*
  - An undergoing project about designing a user-friendly video-generation system based on several GenAI models.
  - Deploy and Integrate different large-scale GenAI models including ChatGPT, AnimateDiff (for video generation), and AudioCraft (for music generation).

- **Undergraduate Research Opportunities Program (UROP1100J)** — HKUST
  Project: Research in AI and Machine Learning   Supervisor: **Prof. Tong Zhang** — *Mar 2023 - Aug 2023*
  - Contribute to developing LMFlow - an extensible, convenient, and efficient toolbox for finetuning large language models.
  - Project Github link: https://github.com/OptimalScale/LMFlow

- **Undergraduate Research Opportunities Program (UROP1000)** — HKUST
  Project: Geometric Flow   Supervisor: **Prof. Frederick Tsz-Ho Fong** — *May 2021 - Sep 2021*
  - Participated in the research of pure mathematics by reading some journal papers under the guidance of the supervisor.

INTERNSHIP EXPERIENCE

- **SOCIF Limited, Hong Kong Science Park** — Hong Kong SAR
  AI Engineer Intern — *Jun 2023 - Aug 2023*
  - Develop end-to-end solutions for automatic license-plate recognition, face recognition, and garbage disposal detection.
  - Acquire substantial experience in building machine learning models using various machine learning frameworks, including PyTorch and TensorFlow.

- **DRESIO Limited, Hong Kong Science Park** — Hong Kong SAR
  AI Engineer Intern (Image Processing) — *Jun 2022 - Aug 2022*
  - Building machine learning pipelines for human body language detection and classification using a series of open-source tools, libraries, and frameworks, including MediaPipe, scikit-learn, pandas, pygame, and OpenCV.
  - Develop end-to-end software to assist elderly people in exercise based on the machine learning models.

HONORS AND AWARDS

- Active member of the S.S. Chern Class in HKUST
- Got the University's Scholarship for Continuing Undergraduate Students
- Obtained the Dean List Award in 4 semesters
- Won the first prize of the 35th Chinese Physics Olympiad in Guangdong

SKILLS SUMMARY

- **Programming Languages**: C++, Python, Java, Kotlin, SQL, Matlab, R
- **Proficient Libraries**: TensorFlow, PyTorch, pandas, numpy, scikit-learn, pygame
- **Languages**: Mandarin(native), Cantonese(native), English(good command, IELTS 7.0)

EXTRACURRICULAR ACTIVITIES

- **Peer Mentor of Mainland Students and Scholars Society, UG Section**   Hong Kong SAR
  Hong Kong University of Science and Technology   *Jun 2020 - Jun 2023*
    - Acted as a team leader in the orientation activities to help freshmen get familiar with the daily life in HKUST
    - Provided Cantonese workshops to teach mainland first-year students how to communicate with local people

- **Vice President of Rubik's Cube Association**   Guangzhou, China
  Guangdong Experimental High School   *Sep 2018 - Sep 2019*
    - Led team members to promote activities, including operating the association's WeChat official account and making posters.
    - Organized the 2nd and 3rd World Cube Association Guangdong Experimental High School Open Championship