Qi-Long Liu

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Google Scholar ☁ ORCID ⓘ GitHub ☉ LinkedIn ⓛ Blog Site ☄

EDUCATION

The Hong Kong Polytechnic University	Sep 2021 – Present
Master of Philosophy, School of Fashion and Textiles	*Hong Kong, China*
Laboratory for Artificial Intelligence in Design (AiDLab)	
Supervised by Prof. Kit-lun Yick, Prof. Joanne Yip and Dr. Yue Sun	
Shenzhen University	Sep 2017 – Jul 2021
Bachelor of Engineering, School of Biomedical Engineering	*Shenzhen, China*
Supervised by Prof. Yongjin Zhou	

AWARDS & HONORS

The Hong Kong Polytechnic University Research Studentship	2021-2022
The Hong Kong Polytechnic University	
Star of Double Innovations (Group Award)	2021
Third Prize, Shenzhen University	
National College Students Biomedical Engineering Innovation Design Competition	2019
Third Prize, The Teaching Steering Committee of Biomedical Engineering in Colleges and Universities of the Ministry of Education	
National College Students Electronic Design Competition in Guangdong Province	2019
Third Prize, The Organizing Committee of the Guangdong Province Division of the National Undergraduate Electronic Design Competition	

PUBLICATIONS

Under Review

Qi-long Liu, Kit-Lun Yick, Yue Sun, and Joanne Yip. An exploratory semi-automatic approach for dense tracking of breast motion in 4d. *PLoS One*, 2023

Journal

Li-Ying Zhang, **Qi-Long Liu**, Kit-Lun Yick, Joanne Yip, and Sun-Pui Ng. Analysis of diabetic foot deformation and plantar pressure distribution of women at different walking speeds. *International Journal of Environmental Research and Public Health*, 20(4):3688, February 2023

Qiu-Qiong Shi, Pui-Ling Li, Kit-Lun Yick, Jiao Jiao, and **Qi-Long Liu**. Influence of contoured insoles with different materials on kinematics and kinetics changes in diabetic elderly during gait. *International Journal of Environmental Research and Public Health*, 19(19):12502, September 2022

Conference

Qi-Long Liu, Kit-Lun Yick, Kam-Ching Chan, Sin-Tung Wong, and Sun-Pui Ng. Sports bra pressure: Effect on core body temperature and comfort sensation. In *Ergonomics In Design*. AHFE International, 2022

Open-source Projects *(selected)*

FEcluster	2023
Distribute FE simulation tasks across multiple computers via SSH	*Link*
mesh4d	2023
Toolkit for 4D (3D + T) data visualisation, operation, and dynamic estimation	*Link*
qilong-liu.vercel.app	2023
Minimalist personal blog site based on Next.js and Tailwind	*Link*
pedarProbe	2022
Data analysis framework for pedar plantar pressure sensor	*Link*
mobjTOB	2022
Self-customized Manim mobjects for visualizing Machine Learning framework e.g. MLP, CNN, and Transformer	*Link*
Beamer-LaTeX-Themes	2022
Customized beamer templates for PolyU, SZU, and more	*Link*

Specialized Skills

Languages
English (fluent); Mandarin (native); Cantonese (native)

Programming Languages
Python (seasoned); Matlab (intermediate); JavaScript (intermediate); C/C++ (basic); Shell Scripting (intermediate);

Technical Stacks
Data Processing & Visualization with Python (seasoned); LLM Application with LangChain & OpenAI API (intermediate); Machine Learning with PyTorch (intermediate); Web development with Next.js (intermediate); Desktop/Mobile Application with Electron/Reactive Native (basic); Finite Element Modelling (basic)

Tool Set
Documentation with Sphinx & ReadTheDocs (experienced); Version Control with Git & GitHub (experienced); Typesetting with LaTeX (experienced)

Work Experience

Shenzhen Base of The Hong Kong Polytechnic University	Dec 2020 – Jun 2021
Student Assistant (part-time)	*Shenzhen, Guangdong, China*
Shenzhen Zhishixinyun Educational Technology Ltd.	Nov 2019 – Mar 2020
Software Engineer (internship)	*Shenzhen, Guangdong, China*