CHOI LAM WONG

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SUMMARY

Computer science graduate from *UCL* with expertise in robotics, deep learning and software development. Proven ability to conduct research (e.g. diffusion-based motion planning at *FAST lab, Zhejiang University*) and lead engineering team (e.g. drone patrol system at *USR group, CUHK*).

EDUCATION

University College London London, UK
BSc & MEng Computer Science ***First Class Honours*** Oct 2018 - Jun 2022

SKILLS

- **Technical Stack:** C/C++, Java. Python, PyTorch, SciPy, ROS, Docker, Git
- **Deep learning models:** Hands-on experience with implementations, training, testing, and deployment.
- **Software dev:** Expertise in CI/CD, testing automation, cross-functional collaboration, etc.
- **Language Proficiency:** Chinese and Cantonese (Native). English (Fluent, IELTS 7.5).

WORK EXPERIENCES

Research Assistant Zhejiang, China
FAST lab, Zhejiang University Sep 2024 - Sep 2025

- **Co-developed** a diffusion-based generative model for mobile manipulator motion planning, combining truncated diffusion and DDIM to reduce sampling time.
- **Implemented** literature-derived techniques for environment encoding and path planning.
- **Achieved** significant improvement in planning efficiency compared to SOTA path planning means.

Research Assistant Hong Kong, China
USR group, Chinese University of Hong Kong Nov 2023 - Jul 2024

- **Led** a team to develop an autonomous drone patrol system for Hong Kong government
- **Acted as liaison** between the engineering team and government stakeholders
- **Designed** system architecture for data persistence, real-time monitoring and data processing

PUBLICATIONS

(*Equal contribution)

L. Xu*, **C. Wong***, M. Zhang, J. Lin, F. Gao, "Diffusion-based Motion Planning for Mobile Manipulators in Clusters". (submitted to *IEEE Robotics and Automation Letters (RA-L)*)

L. Xu*, **C. Wong***, M. Zhang, J. Lin, F. Gao, "Trajectory Optimization for Differential Drive Mobile Manipulators via Topological Paths Search and Arc Length-Yaw Parameterization ", *Preprint*. arXiv:2507.02761

PROJECTS

Intel DPCT-companion Development London, UK
Collaboration with Intel DPC++ group Sep 2021 - Jan 2022

- Developed DPCT-companion, a CUDA-to-DPC++ **code migration toolset**, reducing manual porting effort
- Built a **unified test harness** to validate functional equivalence between CUDA and migrated DPC++ code

Microsoft Eye-tracking application development London, UK
Collaboration with Microsoft Oct 2019 - Jan 2020

- Designed and deployed a **Universal Windows Platform (UWP) application** with C# and XAML for eye-tracking device, enabling entertainment access for users with motor disabilities (e.g. ALS)
- Integrated **Azure pipelines** for automated builds and deployments, improving development efficiency
- Collaborated with Microsoft specialists to **design a user-friendly UI** optimized for eye-tracking input

AI for the common good hackathon Paris, France
Collaboration with X5GON Sep 2019 - Feb 2020

- **Co-develop** a web application and won the third prize; Invited to present in British Embassy Paris
- Responsible for **backend development** with Java Spring Boot, MySQL and JPA