

# Tsang Hong Ting

☎ +852 6680 6149 | ✉ httsangaj@connect.ust.hk | 📧 gzone0111 | 🌐 Hong Ting (Dennis) Tsang | 🌐 Personal Website

## EDUCATION

---

**Hong Kong University of Science and Technology** Sep 2020 - May 2024  
Bachelor of Engineering, Major in Computer Science, Minor in Robotics GPA: 3.605 / 4.3  
**Master of Philosophy in Computer Science and Engineering** Sep 2024 - May 2026 (Expected)  
Notable coursework:  
• UROP2100 - Undergraduate Research Opportunities - Ongoing research on Hyper Knowledge Graph Complex Query Answering  
• COMP4222 - Machine Learning with Structured Data: - Venture Capital Link Prediction  
• COMP4981 - Final Year Project: - Leveraging GPT Technologies to Enhance English Education: A Web Application for Secondary School Students  
**Exchange Program:** HKUST School of Engineering Undergraduate Outbound Exchange Program: The University of Texas at Austin (United States) Jan 2023 - May 2023

## WORK EXPERIENCE

---

**Intelligent Design Technology limited** Hong Kong  
*Software Developer (Summer Intern)* Jun - August 2022  
• Design, develop, implement application on Robot running Android system, with Google Speech-To-Text API for child education. Draft user manual and project documentation with flow graph included.

## LEADERSHIP AND EXTRA-CURRICULAR ACTIVITIES

---

**HKUST Robotics Team**  
*Head of Software Engineering Department* Dec 2021 - Dec 2022  
• Programmed robot using STM32 low-level C Programming collaborate with Python applications for Image Processing.  
• Implementing project milestones and allocate tasks according teammates characteristics. Organize regular meeting and manage weekly progress.  
**Undergraduate Research Opportunities Program: Indoor Localization and Mobile Computing** June - Dec 2022  
• Develop android application for mobile computing with R&D team and assist with backend development using Flask. Research working on smooth transition from indoor to outdoor positioning.  
**Undergraduate Research Opportunities Program: Graph Machine Learning for Logical Reasoning** June 2023 - Present  
• Exploring the integration of logical reasoning with machine learning, with an emphasis on graph machine learning. Conduct research by reading relevant papers, designing algorithms, conducting experiments, and drafting papers.

## PROJECTS

---

**Venture Capital Link Prediction** | Python & Graph Neural Network & Machine Learning & DGL Nov - Dec 2022  
• Construct Link prediction model for investment prediction between Start-ups and investors  
• Utilizing GNN methods for aggregating hidden information in data to create investment prediction models. Models included: GCN, ChebNet, GraphSAGE, Matrix Factorization, VGAE, etc.  
**Morts Object Detection (ROV)** | Machine Learning Nov - Dec 2021  
• Using TensorFlow zoo library pre-trained model with data set created using Roboflow to train and create morts fish detection model.  
**Remotely Operated Underwater Vehicle** | Embedded C Programming & Python & STM32 & ROS Feb 2021 - Jun 2022  
• Build software for low-level controlling board. Construct message passing system between robot and computer  
• Image Processing program using C++ and Python. Construct GUI with Vue framework for robot driver.

## AWARDS AND SCHOLARSHIPS

---

**2022 MATE World Championship ROV Competition – TELEPRESENCE**—4<sup>th</sup> in Global 2021  
• Software development and Product presentation in competition, demonstrating features and strength of our ROV.  
**HKSAR Government Scholarship Fund - Reaching Out Award** 2022-23  
**University's Scholarship Scheme for Continuing Undergraduate Students** 2021-23  
**HKSAR Government Scholarship Fund - Talent Development Scholarship** 2021-22  
**Dean's List** 2020-21 Spring, 2021-22 Spring

## TECHNICAL SKILLS

---

- **Computing Language:** Extensive Experience - Proficient *C, C++, Python, Java, SQL*. Beginner - *HTML, CSS, Javascript, Kotlin*
- **Programming Framework:** Extensive Experience Proficient - *TensorFlow, PyTorch, DGL, NumPy, Matplotlib*. Beginner - *Vue, React*
- **Development Tools:** Extensive Experience - *VsCode, Git, Github, Android Studio*.
- **Language:** Native - *Cantonese*. Fluent - *English and Mandarin*.