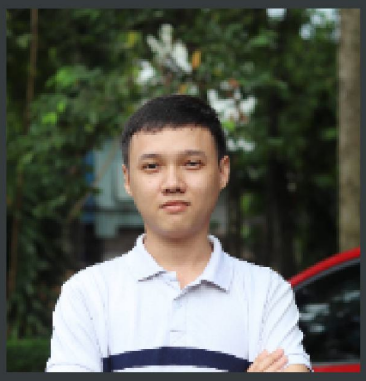

MINH KHIEM TRAN

SOFTWARE ENGINEER

PROFILE

037 8526 654

minkeii2211@gmail.com

github.com/Minkei

linkedin.com/in/minkei22

Thu Duc, Ho Chi Minh City

SKILLS

PROGRAMING

- C#, C/C++
- Qt Framework
- OOP
- SQL
- Winform, WPF

SOFTWARE

- SolidWorks
- Matlab
- Visual Studio
- Visual Studio Code
- RobotStudio
- RoboGuide
- EPLAN
- AutoCAD

SOFT-SKILLS

- Time Management
- Teamwork
- Problem Solving
- Documentation
- Research skills
- Report writing

LAGUAGES

- English
- Vietnamese

INTRODUCTION

Over one year of experience in robotics research and development in academia, along with more than one year of hands-on experience working with industrial robots. Proficient in programming through private projects, particularly in **C#** and **object-oriented programming (OOP)**.

EDUCATION

AUTOMATION AND CONTROL ENGINEERING **2019 - 2024**

HCMC University of Technology and Education

Good

WORK EXPERIENCE

AUTOMATION ENGINEER **Aug 2024 - Dec 2024**

IMAS JSC

- Progame & simulation the ABB robot operation to review the cycle time in automation solution
- Receive customer information and compile a list of electrical equipment
- Participate in the development of electrical drawings
- Design electrical enclosures according to customer requirements
- Participate in the installation and wiring of electrical equipment according to electrical drawings

ROBOTICS ENGINEER **Apr 2024 - Jun 2024**

NEXT ROBOT CO., LTD

- Connect electrical wiring for automatic equipment & the electrical cabinet
- Program ABB robots used for two automatic palletizer systems in Unilever Cu Chi Factory
- Collaborate with the PLC programmer to meet the requirements of the factory and complete the project

ROBOTICS INTERN **Oct 2023 - Mar 2023**

NEXT ROBOT CO., LTD

- Study, research the relevant documents for installing, operating, and programming the ABB and Fanuc robots..
- Support in preventing maintenance, diagnosis, and repair of the robots (Dan On, Tairui)
- Install, program the Fanuc robot to manufacture the ergonomic chair made from composite fiber (Gia Thai DoctorLoan)
- Updated the ABB, Yaskawa, and Hyundai robot programs used in the production of mobile displays (LGDVH)

RESEARCH STUDENT **Mar 2022 - Jul 2023**

Robotics and Intelligent control Laboratory (RICLAB)

- Research, calculate, and simulate the kinematics, and dynamics mathematical of the 4-DOFs manipulator
- Research, design, and simulate the intelligent control algorithm to control robots such as Computed Torque Control, Sliding Mode Control, PID-GA, Neutron Control, and Fuzzy Control for the 4-DOFs manipulator
- Design, manufacture, calculate, simulate and experiment the teleoperation control system for the 6-DOFs serial cable robot

INTERESTS

Music
Free-line

REFERENCES

Assoc. Prof. Dr. Tran Duc Thien
Lecturer at HCMC UTE
Email: thientd@hcmute.edu.vn
Phone: 0988 862 588

PROJECTS

IMAS JSC **Dec 2024 - Dec 2024**

Design QRScanner application

- Designed a **GUI application** using **WPF** and **C#** for login, scanning available cameras connected to the computer, streaming camera data on-screen, detecting, and decoding QR codes
- Integrated with **SQL Server** to store user accounts and QR code data securely
- Applied the **MVVM pattern** to ensure a clean and maintainable GUI application **architecture**
- Implemented functionality to export stored data to .xlsx files for reporting purposes.

RICLAB **Jan 2023 - May 2023**

Design model and teleoperation control system for the 3-DOF manipulator

- Designed a teleoperation control system that uses a 3-DOF joystick to control a 3-DOF manipulator model.
- Calculated the workspace mapping algorithm and implemented it in simulation (MATLAB/Simulink) and experimentation.
- Designed wireless communication via radio frequency and implemented real-time collection using **C#** on **Windows Forms**.
- A science paper is expected published in JTE journal in August.

RICLAB **Dec 2022 - Jul 2023**

Design model and teleoperation control system for the 6-DOF serial cable robot

- Designed a 6-DOF serial cable robot model in SolidWorks and manufacture the model.
- Verified the kinematics through simulation (MATLAB/Simulink) and experimentation.
- Calculated the workspace mapping algorithm and implemented it in simulation (MATLAB/Simulink) and experimentation.
- Designed a PCB for the **CAN** module and created a 7-node **CAN network** for synchronous robot control.
- Designed wireless communication via radio frequency and implemented real-time data collection using **C++** using **Qt Creator** on Jetson Nano microcomputer.
- A science paper is expected published in Applied Sciences Journal in March.
- Link video: https://youtu.be/UZOoC3LWudE?si=JZC4d1gp4DFC9QFx

HONORS & AWARDS

2023 Special Award, 2nd RAVTE Student Inovation Awards

2023 Outstanding Topic Award, Scientific Research 2023 of HCMC UTE