

Ni-Ching 'Monica' Lin

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EDUCATION

M.S. Institute of Electrical and Control Engineering National Chiao Tung University Sep,2016 – Jan,2019
(NCTU), Taiwan

Thesis: Autonomous Surface Vehicle for Maritime RobotX Challenge

B.S. Department of Electrical Engineering Tamkang University (TKU), Taiwan. Sep,2012 – Jan,2016

GPA: 3.89/4.00, Ranking: 3/67.

EXPERIENCES

Hardware R&D Engineer/Hardware System Integration Engineer, QCraft Inc. Oct,2019 – Now

Research and development

- Designed/Built Self-driving Hardware System for Cars (Lincoln MKZ, Jinlv minibus, Pix Loop, etc.)
- Designed/Simulate Sensors' Position on Self-driving Cars
- Designed/Built/Tested Computation System

Mechatronics Engineer, XYZ Robotics Inc. Apr,2019 – Jul,2019

Research and development

- Upgraded/Built Production End of Arm Tool (EOAT) with Magnetic Breakaway and Z Compliance
- Upgraded/Built/Test Polybag Cup Characterization handle high mass skus in loose poly-bags

WAM-V Integration Lead, Maritime RobotX Competition Oct,2017 – Dec,2018

(WAM-V Wave Adaptive Modular Vessel)

System Designed (NCTU WAM-V Autonomous System)

- Coordinate rapid engineering changes across multiple disciplines
- Designed/Built/Tested Power, Internet, and Motor Systems
- Conducted investigations and resolved in-field issues

End Effector Lead, Independent Study, NCTU Sep,2018 – Feb,2019

System Design (End Effector for Amazon picking challenge)

- Designed/Built a parallel and vacuum gripper that can handle high mass warehouse items
- Designed/Built an electronic board for the gripper

TECHNICAL SKILLS

Mechanical/Electrical Software: SolidWorks, Fusion 360, Altium Engineering, EasyEDA

Fabrication tools: Soldering, 3D Printing, Vertical CNC Milling, Lathe Turning, Laser Cutting

Libraries & Tools: ROS, Windows, Linux, git, vim, Gazebo, Docker, Jira, Script, Python, Slack

PUBLICATIONS

[C1] **N.-C. Lin** (Eds.), *"Duckiepond: A Reproducible, Flexible, and ML-Compatible Education and Research Platform for a Fleet of Autonomous Maritime Vehicles"*, Accepted by IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2019).

[C2] T.-K. Chuang*, **N.-C. Lin*** (Eds.), *"Deep Trail-Following Robotic Guide Dog in Pedestrian Environments for People who are Blind and Visually Impaired - Learning from Virtual and Real Worlds"*, IEEE International Conference on Robotics and Automation(ICRA 2018). *T.-K. Chuang and N.-C. Lin contributed equally to this work.

HONOR & AWARDS

5th Place and Best Single Day Performance, 2018 RobotX Challenge. (\$4,000 &\$2,000 USD) Dec,2018

Pilot Overseas Internships, Ministry of Education, Taiwan. (\$10,000 USD). Jun,2017

First Place Award, HIWIN Intelligence Robot Implementations Contest, Taiwan (\$13,000 USD) Jul,2015

Da Yu Award, College of Engineering Tamkang University (Top 3%) Mar,2015