Yu-Ting Lai

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| Graduate Student Researcher | yutingkevinlai@ucla.edu | +1 (310) 498-9015 | yutinglai.com |

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| **EDUCATION** | |
| 2018 | **M.S. in Electrical and Control Engineering**, National Chiao Tung University (NCTU), Hsinchu, Taiwan |
| 2016 | **B.S. in Mechanical Engineering**, National Tsing Hua University (NTHU), Hsinchu, Taiwan |

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| **EXPERIENCE** | |
| Feb. 2020 – Present | **Graduate Student Researcher**, Mechatronics and Controls Laboratory (UCLA) |
| * Demonstrated an autonomous posterior capsule polishing with 5 µm accuracy on *in situ* *ex-vivo* pig eyes using Optical Coherence Tomography (OCT) feedback. * Developed a collaborative control strategy based on Iterative Learning Control (ILC) for two 6-axis robot manipulators to enable 6 DOF position and force control. | |
| Jun. 2018 – Feb. 2019 | **Assistant Researcher**, Industrial Technology Research Institute (ITRI), Hsinchu, Taiwan |
| * Developed a traffic light detection and recognition framework on autonomous vehicle by integrating LiDAR localization and camera image processing. * Demonstrated a fully autonomous driving of 15 km in an urban area without human engagement. | |
| Sep. 2016 – May. 2018 | **Graduate Student Researcher,** Embedded SystemsLaboratory, NCTU, Hsinchu, Taiwan |
| * Developed an automated anomaly inspection on data collected from industrial partners using deep learning and generated adversarial network. | |

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| **HONORS & AWARDS** | |
| 2019 | Innovation Award, ITRI, Taiwan |
| 2018 – 2019 | Institute Distinguished Research Award, ITRI, Taiwan |

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| **SKILLS** | |
| **Programming:** | C/C++, Python, MATLAB, LabVIEW |
| **Robotics:** | PID/Feedforward control, trajectory planning, dynamics, image-based robot guidance |
| **Prototyping:** | Solidworks, Milling, Drilling, 3D printing |
| **Language:** | Mandarin/Taiwanese (Native), English (Proficient) |
| **Other:** | LaTeX, Adobe Illustrator |