莊博宇 Jesse Chuang

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| **SKILLS** |
| * **Program Language**  1. C++ 2. Python  * **Open Source Lib** * Computer vision  1. OpenCV 2. Point Cloud Library(PCL)  * Machine Learning  1. Alchemy (Lib for Markov Logic Networks) 2. LibSVM 3. Machine learning Python(MLPY)  * **Software**  1. Robot Operating System (ROS) 2. GitHub 3. Matlab 4. Octave 5. SolidWork |
| **EDUCATION** |
| * **Ph.D. Candidate of Electrical Engineering, National Taiwan University**   **Sep 2011 - Present**   * International Center of Excellence in intelligent Robotics and Automation Research(NTU-iCeiRA ) , Prof. Ren C. Luo * Major in visual servo control and machine learning group * **Master of Mechanical Engineering , National Taiwan University**   **Sep 2009 – June 2011**   * + Systematic Mechanism Design Laboratory, Prof. Dar-Zen Chen   + Major in mechanical design group * **Bachelor of Mechanical and Electro-Mechanical Engineering**   **, National Sun Yat Sen University**  **Sep 2005 – June 2009**  **RESEARCH RESULTS AND PUBLICATIONS** |
| * **Computer vison and machine learning**  1. Task-oriented visual servo system of robot arm for 3D object based on automatic multilayer networks learning approach  * Submitting journal paper to IEEE Transaction on Automation Science and Engineering, March 2014  1. Hybrid eye-to-hand and eye-in-hand visual servo system for robot arm  * Research project funding by ITRI of Taiwan, 2013 * Proceeding of international conference WCICA 2014  1. Self-calibration system for 3-DOF delta robot by neural networks  * Research project funding by ITRI of Taiwan, 2013  1. Multi-objects recognition using unsupervised learning and classification  * Proceeding ofIEEE International Symposium on Industrial Electronics (ISIE), 2013  1. Visual servo control system for delta robot  * Research project funding by ITRI of Taiwan, 2012 * **Mechanical design and control system design**  1. 6-DOF parallel type robot arm with extendable work space  * Invention Patent pending, June 2014  1. 4-DOF parallel type robot arm  * Award first prize of 2014 Taiwan Industrial Robot Competition  1. 11-DOF robot hand for massage application 2. Constant speed ratio shaft coupling mechanism  * **Other Projects**  1. Technology of 3D rapid prototyping for intelligent mold and medical device  * Ministry of Science and Technology (MOST) funding project, 2014  1. International Center of Excellence on Intelligent Robotics and Automation Research（iRICE）  * Ministry of Science and Technology (MOST) funding project, 2012   **WORK EXPERIENCE** |
| * **尚紘國際實業 Taipei, Taiwan**   Mechanism designer and software engineering  Feb 2012 - June 2014   * Customize mechanism design * Industrial automation module design |