Xiyang Yeh

4500 Great America Parkway, 368, Santa Clara, CA 95054, USA
www.linkedin.com/in/xyyeh xiyang.yeh@flexiv.com

Education

Stanford University **California, USA**
Ph.D. in Mechanical Engineering, GPA: 4.0/4.0 *2012 - 2017*
Thesis: Development of An Underwater Humanoid Robotic Diver
Advisors: Oussama Khatib, Mark Cutkosky

Stanford University **California, USA**
M.Sc. in Mechanical Engineering, GPA: 4.0/4.0 *2010 - 2012*

National University of Singapore **Singapore**
B.Eng. in Mechanical Engineering, GPA: 4.9/5.0 *2004 - 2008*

Professional Experience

Flexiv Robotics Ltd. **California, USA**
Chief Technology Officer *2017 - Present*
- System design and architectural planning for articulated robotic systems,
- Oversee hardware/software integration and product certification efforts.
- Develop performance characterization and evaluation methods for robotic systems.

Stanford A.I. Laboratory **California, USA**
Research Assistant *2012 – 2017*
- Developed world's first-of-its-kind underwater humanoid robotic platform, Ocean One.
- Led deployment efforts of Ocean One off the coasts of France and Greece for archaeological missions.
- Developed generalized design methodology of robotic systems that is optimized for dynamic response.
- Developed real-time force and torque control framework for Ocean One's dual manipulators and base.
- Developed novel active buoyancy control system to achieve cancellation of parasitic couple due to mismatch in centers of buoyancy and mass.

Stanford A.I. Laboratory **California, USA**
Graduate Student Researcher *2010 – 2012*
- Combined electromechanical and pneumatic actuators to achieve fine resolution force control.
- Combined pneumatic actuators with particle brakes for improved performance during interaction.
- Synthesized spring-loaded cam system to compensate gravity forces on a large workspace haptic device.
- Developed a high stiffness pantograph closed chain cable-driven haptic device.

Singapore Institute of Manufacturing Technology **Singapore**
Research Engineer *2008 – 2010*
- Developed FPGA-based multi-axis motion controller cards for industrial manipulators.
- Developed flexible beam-based continuum robots for remote inspection purposes.
- Evaluated the possibility of using industrial robots for automated machining and surface finishing of aerospace and marine structural components.

Awards

Stanford Graduate Engineering Fellowship, 2010 for exceptional students pursuing doctoral studies in engineering at Stanford University.
ExxonMobil Medal, 2008 by ExxonMobil for best graduating B. Eng. student in Mechanical Engineering at National University of Singapore.
IMechE Award, 2006 by the Institution of Mechanical Engineers for best student across all years in Mechanical Engineering at National University of Singapore.