ZHANG XIU

Personal Information

Date of Birth: 09/22/1995 **Gender:** Male

Email: xiu.zhang@polimi.it **Mobile:** +39 3511570400

Add: Politecnico di Milano – Campus Colombo
Via Giuseppe Colombo, 40,
20133 Milano

Education Background

09/2021-present: **Politecnico di Milano**
Major: Bioengineering
Research Topic: Modeling and Control of Steerable Catheters

10/2018-04/2021: **Politecnico di Torino**
Major: Mechanical Engineering
GPA: 105/110

09/2013-06/2017: **China University of Mining and Technology (CUMT; 211 Project)**
Major: Mechanical Engineering (Distinguished Engineer Class)
GPA: 3.59/4.0

Projects Experience

09/2021-present **ARTERY Project**
Member

- ✧ Responsible for designing the control algorithm of the robotic catheters in structural intervention cardiology

11/2015-08/2016 **Robomaster CUMT-DJI-Laboratory**
Member

- ✧ Responsible for the 42mm golf ball launch system, innovated a three friction wheel launch system with Magnus effect.
- ✧ Designed a test platform by using 3-D printed components.

09/2015-06/2016 **Jiangsu Undergraduate Mechanical Innovational Design Competition**
Group Leader

- ✧ Designed a machine that helps people carry large cargo upstairs and assembled a prototype

Publications

Zhang, Xiu, et al. "Robotic Actuation and Control of a Catheter for Structural Intervention Cardiology." 2022 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS). IEEE, 2022.

11/2016 Authorized a patent of utility model (First author; the High-power magnetorheological speed regulating device; CN205669566U)

02/2016 Authorized a patent of invention (water-cooled multi-disk magnetorheological speed regulating device; CN105299086A)

Internship

10/2016-01/2017 **Bosch Rexroth Wujin Plant**

Department of Research and Development (Internship)

- ✧ Developed a software named AUTOBOM independently, which can help the engineer to create the bill of materials automatically. The program was developed in Visual Basic and was deployed officially after 11 generations of revises.

Oversea Experience

05/2021 **Belgium, KU Leuven, Robot-Assisted Surgery Group**

- ✧ Developed the path tracking control algorithm for the tendon-driven steerable catheter.

07/2016 **US, University of Kentucky, CUMT Summer Mining Engineering Program**

- ✧ Invited by the University of Kentucky; Studied some courses in English such as PLC from Rockwell, Basic Economics, and Mining Machine.

Honors & Awards

- ✧ 07/2016 First Place in Robomasters National Student Robot Competition
- ✧ 06/2016 Second Place in Jiangsu Undergraduate Mechanical Innovational Design Competition
- ✧ 03/2016 Second Place in CUMT Mechanical Design Competition
- ✧ 12/2014 Second-class scholarship to CUMT

English Proficiency & Skill Certificate

- ✧ English: IELTS7 (Listening7.5; Reading8; Writing6; Speaking6.5); Test taken on Nov7, 2020
- ✧ Skills: AutoCAD; Solidworks; MATLAB; PLC; Visual Basic; Python; Arduino; ROS

Hobbies

- ✧ Trombone, Fitness, Soccer, Reading, Travelling