Xingyang Hu

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EDUCATION

Tiangong University   Tianjin, China
Bachelor's degree in Network Engineering   09/2020-07/2024

The University of Manchester   Manchester, UK
Master of Science in Robotics   09/2024-07/2025(expected)

WORK EXPERIENCE

Tianjin Focus Culture Technology Co., Ltd.   Tianjin, China
Founder & Executive Director   04/2023-Present

- Established an online platform for photographers to network and book services, managed the application's design and development, orchestrated marketing initiatives, and handled administrative duties.
- Offered internship opportunities to students and graduates, sourced company partners in software development, photography, and video editing.
- Served as deputy secretary-general of the Tiangong University Youth Entrepreneurs Alliance, participating in events and meetings as a spokesperson, with coverage by CNR, China News, NetEase News, Sohu News, and other leading media.
- Interviewed by prominent Tianjin media outlets such as tjyun.com, Tianjin Education Daily, and Tianjin Economic Radio; engaged in a conference organized by the Tianjin Education Commission.

Gesanggu (Tianjin) Technology Enterprise Incubator Co., Ltd.   Tianjin, China
Innovation Assistant   07/2023-09/2023

- Supported the technology transfer officer with concept validation, patent strategies, and the application of scientific research from Tianjin University by initiating projects and seeking corporate partnerships.
- Investigated the implementation of brain-computer interfaces in healthcare, cellular robot technology, precision bearing roller manufacturing, and microwave moisture measurement, devising business strategies for the projects, conducting industry research, and exploring industrial collaboration opportunities.

Jinzhong Cloud Era Technology Co., Ltd.   Jinzhong, China
Pre-sale Engineer   12/2022-02/2023

- Contributed to the digital planning and project execution for the Digital Campus of Jinzhong Vocational and Technical College, the Smart Campus project for Yuci Affiliated School of Shanxi Normal University, and comprehensive grassroots management in Jinzhong City districts and counties.

Tianjin Youpaisen Network and Technology Co., Ltd.   Tianjin, China
CCNA Lecturer   10/2021-06/2022

- Taught network techniques such as VLAN, STP, HSRP, ACL, NAT, and OSPF.
- Coached students in the use of Cisco routers and switches and supported the network architecture design for small business environments.

RESEARCH

Biomimetic Snake-shaped Robot   09/2021-06/2023

- Designed a robot inspired by snake biological characteristics, achieving various motion types, such as planar motions like meandering and rolling, and complex spatial motions like lateral meandering, climbing, docking, and obstacle crossing.
- Utilised programming languages, notably Matlab and Python, to establish motor communication

protocols and motion control codes, while implementing camera and Apriltag technology for terrain surveying and image recording experiments.

- Created a control system using an upper and lower computer control mode, directly driving the joints with the servo; the programme simultaneously ran two threads.
- Constructed models for motion analysis, determined the forces on the robot during crawling, and ran experiments which showed the robot's smooth and efficient movement.
- Wrote the paper "The Research on Climbing Movement of Snake Robot" as the lead contributor, which was recognised by the 7th National Symposium on Space Flight Dynamics Technology.

Intelligent Traffic Light System for High-Priority Vehicles   09/2020-09/2021
- Conducted experiments using SUMO and TraCI in Python.
- Developed a system to adjust the traffic light duration based on intersection traffic flow; high-priority vehicles could send requests, triggering green lights for specific sections.

EXTRACURRICULAR ACTIVITIES

Tiangong University Youth Entrepreneurs Alliance
Deputy Secretary-General   07/2023-Present
- Advanced external collaborations and sourced high-quality resources, facilitating student entrepreneurship on campus.

Student Union of School of Software, Tiangong University
Chairman   09/2022-09/2023
- Collaborated with leaders and educators to establish the student union, fostered innovation in the school, and organised events for over 3,000 faculty members and students.

Network Engineering Class 2001
Class Leader   09/2020-Present
- Represented the class in discussions with school authorities about students' academic and living conditions, organised class events, disseminated important announcements, and achieved the title of Advanced Class Collective.

HONOURS & AWARDS

- Tianjin Outstanding Student Leader (11 individuals in total at the university) in 10/2023
- Triple-A Student (good morals, hard study and sporting excellence) of Tiangong University in 10/2023
- Headmaster's 1st Class Scholarship in 2023-2024 academic year
- Headmaster's 2nd Class Scholarship for the academic year 2022-2023
- Headmaster's Scholarship for Social Practice in 2021-2022 academic year
- Outstanding Students of Tianjin Municipality (provincial and ministerial level, 22 individuals in total at the university) in 12/2022
- Outstanding Student Leader of Tiangong University in 12/2021
- 2nd Prize in the 2022 Robot Competition for College Student in Five Provinces (Municipalities and Autonomous Regions) of North China (provincial and ministerial level)
- 2nd Prize in Tianjin in the 2022 National College Student Mechanical Innovation Design Competition (provincial and ministerial level)
- 3rd Prize in the 2021 Robot Competition for College Student in Five Provinces (Municipalities and Autonomous Regions) of North China (provincial and ministerial level)

ADDITIONAL INFORMATION

Professional training: CCIE Certification, 09/2020-09/2022
Computer skills: VMware, centOS, Ubantu, Kali Linux, Windows, Windows Server, Gns3, Cisco Packet Tracer, MySQL, PostgreSQL, Visual Studio Code, IntelliJ IDEA, pycharm,Hbuilder, webstorm，wireshark; Matlab, Python, C, Java, JavaScript, SQL; Gan, CNN, Vue, HTML, CSS, jQuery, Springboot