

Zeyu Deng

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EDUCATION

2021 - Present: PhD in Computer Science, **Louisiana State University (LSU)**, US

2018 - 2019: MSc Internet Engineering, **University College London (UCL)**, UK

2016 - 2018: BEng Electronic and Electrical Engineering, **University of Birmingham**, UK

2014 - 2016: BEng Electrical Engineering and Automation, **Huazhong University of Science and Technology (HUST)**, China

ACADEMIC EXPERIENCE

- 2023.9: Paper accepted at ACSAC 2023
 - Paper: Enhanced In-air Signature Verification via Hand Skeleton Tracking to Defeat Robot-level Replays Arms and Human Motions
- 2023.5: Poster presentation at S&P 2023
 - Poster: Hand-covered PIN Authentication for Virtual Reality
- 2022.9: Poster and demo presentation at UbiComp 2022
 - Poster: Remote Robot Control with Low-cost Robotic Arms and Human Motions
 - Demo: I Am a Robot: First-person Robotic Arm Control with Hand Motions in Virtual Reality
- 2022.3: Poster presentation at MobiCom 2021 (ACM Student Research Competition)
 - Poster: Extracting Human Behavioral Biometrics from Robot Motions
 - Poster: Human Perception-enhanced Camera System for Web Conferences Leveraging Device Motions

SERVICES

- 2022 - Present: Research Assistant (LSU), supervised by Dr. Chen Wang
- 2021 - Present: Teaching Assistant (LSU): Grading and lab teaching
- 2023 - High School Summer Research (HSSR) Speaker (LSU)
- 2022 - High School Summer Research (HSSR) Poster Judge (LSU)

KEY SKILLS

- **Programming:** Python, MATLAB, C/C++ like developing platforms, e.g., ROS, Raspberry Pi, and Arduino
- **Language:** Chinese and English

EXTRA-CURRICULAR ACTIVITIES

- **JROTC Cybersecurity Cadets Visit Speaker:** Give presentation and demo related to cyber-physical security to JROTC cadets from Liberty Magnet High School
- **LSU HSSR Speaker and Judge:** Serve as keynote speaker and poster judge at High School Summer Research (HSSR) Program for K-12 students
 - **UCL MSc Student Representative:** Student representative of MSc Internet Engineering at UCL. Advised students' desires and suggestions to department staff, organized activities such as group study and social.
 - **Student's Association Union Agent:** Organization and backstage work in Association Arts Festivals. Manager of Xiangsheng (traditional Chinese talk show) Society in the Student's Association Union of HUST. Organized the recruitments of xiangsheng performers and amateurs, managed budget and venue.

UNIVERSITY PROJECTS

Final Project – Team Optimization

3/2019 - 9/2019

University College London, UK

- To develop a multiagent deep reinforcement learning method for signal power allocation problems in spectrum sharing. Created a wireless communication environment where agents have imperfect information, trained in a centralized manner and executed in a decentralized manner.
- Wrote a literature review, developed a reinforcement learning method that agents worked cooperatively, wrote programs using Python

Final Year Project - Smart Things and Everyday “Robots”

10/2017 - 3/2018

University of Birmingham, UK

- To research in Tangible User Interfaces (TUIs), Pervasive/Ubiquitous Computing and the Internet of Things (IoT), develop an interactive system which can open and close drawers automatically by detecting the ambient condition and can be controlled within local Wi-Fi network
- Wrote a project report, built a smart cabinet with Adafruit Feather, Blynk server, actuators and sensors, wrote programs with the Arduino IDE

Second Year Project - Luke Linewalker

10/2016 - 3/2017

University of Birmingham, UK

- To build a robot which can automatically follow a black line within a semester
- Wrote the main program with the Arduino IDE
- Developed the appearance of the robot based on the X-Wing fighter from Star Wars with teammates, soldered part of the circuit onto stripboard
- Developed a Gantt chart to help guide the laboratory sessions

Summer Project - Auto Racing Car

7/2016

Huazhong University of Science and Technology, China

- To restructure a remote-control car so it can avoid obstacles automatically
- Designed the control units with microcontrollers, built the circuit with teammates on a breadboard, wrote programs in C