# Lanxuan HONG

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## EDUCATION

**THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY**

Bsc. in Computer Science | additional major in Electronic Engineering | GPA: 3.8/4.3

2023 – Present | HKSAR, China

**XIAMEN NO.1 HIGH SCHOOL**

Grad. June 2023 | Xiamen, China

## SKILLS

**PROGRAMMING LANGUAGES**

Python • C++ • JavaScript • HTML • CSS • React • Matlab • VHDL

**DEVELOPER TOOLS**

Linux • Git • LaTeX • Numpy • Pytorch • Tableau • 3ds Max • Isaac Sim • Arduino • Xilinx (FPGA)

**LANGUAGES**

Chinese • English

## COURSEWORK

- Data Structure (C++)
- Algorithm
- Computer Organization
- Signal and System (Matlab)
- Digital System Design (VHDL)
- Data Visualization (React)
- Artificial Intelligence
- Advanced Deep Learning Architecture (Pytorch)
- Math: Calculus, Linear Algebra, Probability

## LINKS

My Web: justlanxuan

## PROJECTS

**TACTILE SENSOR DESIGN**  2024.06 – 2025.03 | HKUST MIRS Lab

- Develop a tactile sensor for the precise fabric contact detection.
- Soft sensor design and fabrication.
- Design the real-time data processing algorithm
- Robustness experiment.
- The corresponding paper: **A Highly Robust Contact Sensor for Precise Contact Detection of Fabric** (as co-first authors) is published at ICRA 2025.

**SOFT MATERIAL SIMULATION**  2024.09 – 2025.01 | HKUST MIRS Lab

- **Soft material simulation** on Isaac Sim.
- Deploying the reinforcement learning model trained in simulated environment on real robotic arms.

**INTERACTIVE VISUALIZATION DESIGN**  2024.11 | Course Prject

- Develop an **interactive visualization website** for university caffeine consumption and healthcare.
- User studies and feedback evaluation to improve usability.

**WEARABLE DEVICE FOR HEALTHCARE**  2025.02 – Present | HKUST

- Leading a research project about **wearable devices and cameras for Autism disease** .
- Background research on the disease and current solutions.
- Develop a system for an end-to-end digital solution for Autism disease, including data collection, edge computation, and disease recognition.

## ACTIVITIES

**HKUST CKSRI** | Student Helper  2025.02 – Present | HKUST

- Present and demo the latest robotics developments to visitors.
- Experienced in debugging multiple robotics related problems(hardware, software, and machinery).

**CSE PROGRAMMING COMMONS** | Student Helper  2025.02 – Present | HKUST

- Provided guidance for multiple fundamental CS courses.

## AWARDS

**DEAN'S LIST**  Fall 2023, Fall & Spring 2024, Fall 2025 | HKUST

**AEON CREDIT SERVICE (ASIA) SCHOLARSHIPS**  2024 | HKUST