

# Jinming Ren

## EDUCATION

<b>University of Electronic Science and Technology of China (UESTC)</b>	Sept 2022 — Present
<b>University of Glasgow, Dual Degree Program</b>	Sept 2022 — Present
<ul style="list-style-type: none"><li>• <b>Major:</b> Communication Engineering; GPA: 3.87/4.0, Ranking: 2/164 (Top 1.2%).</li><li>• <b>Relevant Coursework:</b> Signals and Systems, Stochastic Processes, Information Theory, Electrodynamics, Digital Circuit Design, etc.</li><li>• <b>Online Course:</b> Abstract Algebra, Complex Analysis, Differential Geometry, Control Theory, etc.</li></ul>	

## RESEARCH & PROJECTS

<b>YOPO: You Only Pick Once – Light Object Tracking Algorithm</b>	Sept 2025
• Developed a lightweight object tracking algorithm that requires only one initial selection, successfully mitigate the intense computation of DNN forward propagation on every frame.	
• Utilized NCC-based matching, adaptive kernel updating, capable of tracking objects with gradual color and size changes.	
<b>Movable Antenna (MA) for Anti-jamming</b>	Feb 2025 — Jun 2025
<i>Research Assistant, Professor Weidong Mei, UESTC</i>	
• Conducted a heuristic investigation into Anti-jamming through stochastic antenna movement.	
<b>Design and Visualization of a Complete Single-cycle RV32I CPU Core</b>	Jan 2025 — Mar 2025
• Designed and simulated an entire RISCV 32-bit CPU from scratch in Verilog for RTL simulation and in Digital Software for working principle visualization.	
• Supported basic peripherals: GPIOs, IIC, UART, etc.	
• Implemented a simple boot ROM in assembly, minimal interrupt service for running a Linux kernel.	
<b>Generalized Fields and Extension to Higher Dimensions</b>	Oct 2023 — Feb 2024
<i>Research Assistant, Professor Yidong Liu, UESTC</i>	
• Investigated generalized natural fields and behaviors in higher dimensions.	
• Provided an alternative perspective of understanding the electric field generated by a charged object by extending it to higher dimensions, making some symmetries in electrostatics much more tangible.	
<b>Human Voice Recognition Smart Car</b>	Sept 2023 — Dec 2023
• Designed and implemented a voice-controlled car on STM32F103 using C standard libraries, supporting actions such as moving forwards/backwards, turning/sliding left/right.	
• Led a 4-member team in the project.	
<b>First Place in “XinTong Cup” Electronic Design Competition</b>	Sept 2022 — Oct 2022
• Designed and implemented a 8-key music player using register-based development in Keil C51 on STC89C52 MCU.	
• Developed functions includes single note/chord playing, recording, replay and rewind capability, etc.	

## RELEVANT SKILLS

<b>IT Skills</b>	Latex, Quarto Markdown, Typst, Manim, Github.
<b>Programming</b>	C/C++, Python, Matlab, Verilog, Chisel, RISCV Assembly, Makefile, Bazel.
<b>Language</b>	Native Chinese, Fluent English.

## AWARDS

<b>Top Academic Scholarship of UESTC (Top 5%)</b>	Dec 2023, Dec 2024
<b>China National Scholarship (Top 3%)</b>	Dec 2024
<b>First Prize: 7th National College Art Exhibition and Performance</b>	Sept 2024