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# YUN-RONG DU

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## Contacts

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## Education and Work Experiences

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- Sep 2020 – June 2024 **Electrical Engineering at National Taiwan University (NTU)**
- Average GPA: 4.1/4.3, 2023 Spring Dean's Award for Academic Excellence
- June 2023 – Aug 2023 **Dell Technologies Taiwan Design Center**
- Electrical Engineering Intern in Power Team
  - Built an automation tool and visualization dashboard for power products management
- Sep 2020 – Present **Math and English Tutor for high school**

## Project Experiences

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- June 2023 – Aug 2023 **Google Hardware Product Sprint: Educational Recycling Bin**
- Won *Google Best Product of the Year* and *Product for Social Good*.
  - Built a recycling bin and implement image recognition to do automatic classification.
  - Designed an interactive web to deliver the correct concept of recycling.
- Dec 2021 – Mar 2023 **NTUEE (National Taiwan University Electrical Engineering) Light Dance**
- Studied protocols and wrote the library for LED control, solved the aberration problem when brightness decays, and improved the transmission speed.
  - Designed PCB layout and validated hardware.
- Sep 2022 – Jan 2023 **Digital Circuit Laboratory: Image Processing for Counting**
- Implemented Blob detection algorithm on streaming pixels on FPGA to achieve fast object detection and counting.
- Mar 2022 – May 2022 **COMPUTEX Taipei with Infineon Technologies: Revolving Recycling Bin**
- Won Infineon Sponsor Prize in MakeNTU with a recycling bin that features high garbage processing speed and capacity, and was invited to demo in COMPUTEX.

## Extracurricular Work

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- June 2022 – May 2023 **MakeNTU • Event General Coordinator**
- The largest student hardware Hackathon in Taiwan with 300 people and 20 enterprises.
  - Led team to raise funding, arrange field setups, maintain tools and electronic materials, build websites, hold workshops, and develop marketing strategies for promotion.
- Jan 2022 – Jan 2023 **NTU for FRC (FIRST Robotics Competition) • Director**
- Gave lectures for more than five high schools to promote STEM education.
  - Volunteered in the 2022 FRC Regional in Taiwan as the Control System Advisor.
- Oct 2023 **Taipei City Government x TSMC High School Women-in-Tech Forum • Host**
- Hosted the forum with over 100 students to promote diversity and inclusion in STEM.

## Research

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- Sep 2022 – June 2023 **Electronic Research IC Lab, Prof. Tsung-Hsien Lin**
- Worked on amplifiers and oscillators, focusing on improving circuit stability.
- Sep 2022 – June 2023 **Robot Learning Lab, Prof. Shao-Hua Sun**
- Worked on Multi-Task Decision Transformer, aiming to realize offline skill merging.

## Skills and Languages

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- **Programming** C++ / Python / Java
- **IC Design** Verilog HDL / FPGA / SPICE / Virtuoso
- **Language** Mandarin Chinese (Native) / English (Fluent) / German (Beginner) / Japanese (Beginner)
- **Profession** VLSI Design / Reinforcement Learning / Robotics / Hardware System