Shidu(Ryan) Ren

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Undergraduate 2nd Year Engineering Student

EDUCATION

Bachelor of Applied Science**, PEY Co-op -** [University of Toronto] 2023.09-2028.04

*Major in [**Computer Engineering**], Minor in [**Engineering Business & AI Engineering**]*

- Overall GPA: [**3.83**]
- **Relevant Courses**:
  APS360 Fundamentals of Deep Learning (**Pytorch**) || ECE297 Software Design and Communication (**C++/Git**) || ECE231 Intro. Electronics (**LTspice**) || ECE241 Digital Systems (**Verilog, FPGAs)**
- Academic Achievement:
  [**Kaggle AI Competition**: Binary Classification of Insurance Cross Selling, Rank: **60/2236**]
  [UofT Engineering Dean's Honours List for Every Semester **(Top 30)**]

PROFESSIONAL EXPERIENCE

[Pedestrian Simulation Software Development] 2024.07 – 2024.09

Beijing Urban Construction Group *Beijing, China*

- Simulate passenger flow through various facilities in a metro system using **Java**
- Collected and analyzed statistical data on density, speed, and flow rate of passengers, understanding the efficiency of passenger flow in different scenarios.
- Enhanced proficiency in **JavaFX,** particularly in developing graphical simulations

[Embodied Intelligence Research Intern] 2024.06 – 2024.09

Beijing University of Posts and Telecommunications *Remote*

- Researched the history, trends, challenges, and future of **embodied intelligence**, compiled findings into a comprehensive article
- Fine-tuned a model using the **YOLOv8** to recognize various buttons on an iPhone UI, implementing an automated food ordering feature
- Gained insights into embodied intelligence, enhancing research and writing skills

PROJECT EXPERIENCE

[Side-Scrolling Game Development: New Hacks 2024 Hackathon] 2024.10.26 - 2024.10.27

Lead Designer *UofT IEEE*

- Led a team in developing a 2D side-scrolling platformer game in **Unity**, where players avoid obstacles reaching the finish line
- Created the development plan, assigned tasks to team members, and ensured efficient project progression
- Implemented complex movement mechanics, such as a double-jump feature, and learned animation handling for enhanced player interaction

[Design Team: UTRA Autonomous Rover Team (ART)] 2023.09 - 2024.04

Embedded System Designer *University of Toronto*

- Led design and implementation of the **Rover's embedded system**, including **GPS integration**
- Researched and selected temperature sensors, designing circuits for fault diagnostics
- Explored **Arduino OS** compatibility, contributed to user instructions, and gained insights into system design, sensor integration, and troubleshooting, enhancing technical skills.

SKILLS

- **Languages:** Python | Java | C/C++ | JavaScript | HTML/CSS | MATLAB | Verilog
- **Tools:** React | Pytorch | TensorFlow | Unity | Quartz | CUDA | IntelliJ IDEA | JavaFX | Git | Adobe | FGPAs
- **Soft Skills:** Proven leadership and collaboration skills, strong verbal and written communication, critical thinking skills, innovative and open-minded