Ding (Eric) Ding

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EDUCATION

University of Michigan Ann Arbor, MI, United States
B.S., Computer Science, GPA. 4.00, Dean's List, Dual Degree Program Apr. 2024
Shanghai Jiao Tong University Shanghai, China
B.S., Electrical and Computer Engineering, GPA. 3.78 Aug. 2024
Main Courses Taken
Data Structures and Algorithm, Introduction to Machine Learning, Computer Vision, Computer Science Fundamentals, Computer Organization, Operating System, Embedded System Design, Electronic Circuits, Signals and Systems, Logic Design, Electromagnetics, Quantum Electromagnetics, Introduction to Aerospace Engineering

SKILLS

Programming C, C++, Python, PyTorch, Matlab, R, R Shiny, Mathematica, Elm, Verilog, HTML, CSS, JavaScript, LaTeX, Shell, ARM assembly, OpenGL, Multithreading, Object Oriented Programming, Functional Programming
OS and Development Tools Linux Ubuntu (running on self-built PC), macOS, Windows, Docker, Git, GDB, Valgrind, Shell, VSCode, STM32CubeIDE, XCode, Icarus Verilog
Simulation and Modelling Catia, Matlab, Mathematica, Pspice, Proteus, Vivado

PROJECT, RESEARCH, AND WORK EXPERIENCE

AI Safety Researcher Sep. 2022 - Dec. 2022
Michigan AI Safety Initiative, University of Michigan Ann Arbor, Michigan, United States
- Participated the student-led seminar focused on the problem of aligning advanced AI to follow human values
- Built a Q-learning Reinforcement Learning model in Python to automate a taxi cab in gym playground
- Explored specification gaming and alignment issues in Reinforcement Learning

Electrical Subteam Engineer Mar. 2021 - Aug. 2022
Shanghai Jiao Tong University Formula Student Racing Team Shanghai, China
- Designed electrical and electronic components and subsystems for formula student racing cars using Catia
- Optimized electrical wiring and ECU design from previous projects to build faster and more reliable racing cars
- Won national second prize of 2021 Formula Student Combustion China as a team

Leader of China May Day Mathematical Contest in Modeling Project Team May 2022
UM-SJTU Joint Institute, Shanghai Jiao Tong University Shanghai, China
- Led a team to build a gray comprehensive evaluation model and a neural network prediction model with Softmax classifier in Python and Matlab, based on a dataset of a city's fire alarm systems (various sensors' false alarm rates)
- Evaluated fire alarm systems of different districts in the city, and predicted the credibility of fire alarm signals
- Our paper won the first prize of 2022 China May Day Mathematical Contest in Modeling

***Light Strider* Web Game Developer** link: ericdinging.github.io/light_strider/ Jun. 2021 - Aug. 2021
UM-SJTU Joint Institute, Shanghai Jiao Tong University Shanghai, China
- Developed *Light Strider* in a group of four, using Elm, a functional programming frontend language
- Designed main game architecture, implemented graph algorithms, and built UI elementes
- Received *Certificate of the Interns Choice* award from course instructor

GRANTS AND AWARDS

The Tang Junyuan Scholarship Nominee . . . . . Aug. 2022
Shanghai Jiao Tong University Pu Yuan Future Talent Program Scholarship . . . . . Jan. 2022
Shanghai Jiao Tong University Undergraduate Excellent Scholarship . . . . . Dec. 2021
Second Prize of Shanghai 2021 CUMCM Mathematical Contest in Modeling . . . . . Dec. 2021
Shanghai Jiao Tong University Merit Student . . . . . Nov. 2021