Lirong Yao

Low Rise 8, Cornell University, Ithaca, New York.

E-Mail: ly373@cornell.edu. Tel: (607)-252-6760. Website: **Harmonyano.github.io**

Education

Cornell University, College of Arts & Sciences **Expected May 2023**

Bachelor of Arts in Math & Computer Science **GPA: 3.9, Dean's List Fall 2019**

Related Course:

Object-Oriented Design and Data Structures - Honors, Introduction to Analysis of Algorithms, Data Structures and Functional Programming, Discrete Structures - Honors, Basic Probability, Introduction to Database Systems, UNIX Tools and Scripting, Introduction to Analysis

Additional Coursework (Including Online)

Advanced Placement: Microeconomics (5), Macroeconomics (5), English Language and Composition (4), Physics C: Mechanics (5), Physics C: Electricity and Magnetism (5), Statistics (5), Calculus BC (5)

Johns Hopkins CTY online courses: Multivariable Calculus (2017-2018), Linear Algebra (2018)

Project

Simulating Evolving Artificial Life (via CS2112) **October - November 2019**

- Built a simulation of a hexagonal critter world where critters of different species eat, reproduce, and evolve.
- Implemented a parser that converts critter's genome to an abstract syntax tree and an interpreter to execute the corresponding program.
- Implemented a distributed client-server system, permitting multi-user to view and interact with the model concurrently through GUI.

Programmable Calculator (via CS3110) **March – May 2020**

- Built a calculator that supports variable definition and function definition
- Implemented an interpreter using the environment model to support a "call by name" lexical scope semantic
- Implemented a "solve" method that solves all kinds of equations, including trigonometric and logarithmic ones.

Research

Pioneer Academics **July – September 2018**

- Studied topics on "Science, Technology & Society" under Dr. Marianne de Laet.
- Applied concepts such as actor-network theory, interpretative flexibility, controversy and closure to examine chatbot as a social product. Read related works of Michel Callon and Thomas P. Hughes.
- Published thesis "From Eliza to Xiao Ice: Success of the Social Chatbot in the 21st Century" in "Pioneer Research Journal."

Skills

Programming Languages: Java(expert), C++(expert), MATLAB(proficient), Python(proficient)