Yuze Fu

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Education

Candidate, Honors Bachelor of Science (Coop) (September 2023 – Present)
University of Toronto Scarborough, Toronto, ON.
Mathematics Specialist (Comprehensive Stream), Computer Science Specialist (Comprehensive Stream), 2nd year
CGPA: 4.0
University of Toronto Scholar in 2023-2024

- Solid **C and Python programming** skills developed through taking courses for fundamental knowledge and doing projects in some hacksons.

- Rich **knowledge of data structures and algorithms**, resulted in winning the second prize in the National Olympiad in Informatics (NOIP2020) sponsored by China Computer Federation in 2020.

- Elementary **data analysis ability using R programming**, enhanced through analyzing public data sets online and write reports for them.

- Creative front-end development skills by **Figma, HTML and CSS**, self-studied from online materials and building personal websites

- Basic **3D modeling ability**, using Autodesk software, learnt from technical courses in the middle school and high school.

- Proficient **skills of using Office Software**, utilizing it to everything in daily life and study since 6 years old.

Course Work Experience

Introduction to Computer Science I & II **(2023 Fall & 2024 Winter Semester)**
University of Toronto Scarborough
- Realized the game '2048' with Python by using the knowledge of functions, loops and etc. targeted to improve the proficiency of programming and creative mind.
- Compared the advantages and disadvantages of Python and C by writing the assignment of this course in both of the two languages, aiming to get deeper understandings of both language.

Introduction to Data Science **(2024 Winter Semester)**
University of Toronto Scarborough

- Learned concepts of data science like variance, distribution and bootstrapping, practiced methods such as permutation tests, decision trees and random forests, and developed the ability of using libraries in R, tidyverse and ggplot.
- Leaded a group of 3 students to analyze a public dataset from Ontario Data Catalogue, “ontario-research-funding-summary” by applying concepts and methods grasped in the lecture, and write a report called “Ministry of Colleges and Universities’ Research Project Investments in Toronto” with the results after analysis.

Designing Systems for Real World Problems **(2024 Summer Semester)**
University of Toronto – Study Abroad in Berlin
- Did some background researches on our problem space, a system providing mentorship matching to freshmen in university, through questionaries, interviews, field studies and competitive analysis, aiming to understand the advantages and disadvantages of existing tools and solutions.
- Drew results from the background researches, then used Figma to produce a rudiment of the system and did several rounds of useability tests, aiming to enhance the user experience of our system.

Volunteer Experience

Vice President of Student Development Committee **(September 2021 – June 2022)**
High School Affiliated to Fudan University
- Held a sharing session about academic study by inviting guests, arranging the site and hosting personally, targeted to promote students’ relationships and solve some of the problems in study.
- Dealt with daily work of the committee, such as sending notifications, counting attendance of activities and charging for some fees, aiming to reduce teachers’ additional work.

Work Experience

Programming Assistant **(February 2023 – June 2023)**
Shanghai Luozhong Technology Development Co., LTD
- Helped reprogram the inner system of the company by learning its structure from colleagues and applying programming skills to updating it, targeted to improve the efficiency of daily work.
- Business process of small international trade companies and the whole picture of small factories through on-the-spot investigation, aiming to set a direction for future career in advance.

Teaching Assistant for CSCA67: Discrete Math **(September 2024 – December 2024)**
University of Toronto Scarborough, Department of Computer and Mathematical Sciences
- Prepared and conducted weekly 1-hour tutorials to reinforce students' understanding of discrete math through additional exercises and guided problem-solving.
- Held weekly office hours to provide personalized support, answering course-related questions and clarifying complex concepts.
- Collaborated with instructors in grading quizzes, assignments, term tests, and the final exam, providing detailed feedback to help students improve their performance.

Additional Experience

- Attended and graduated from Intel AI for Youth Express in July 2021, by learning several third-party modules of machine learning in Python, then designing and completing a project “An Automatic Lawn Sprinkler Irrigation System Based on Machine Learning”, facing the challenge of time shortage and knowledge applying in only two days.

- Gained leadership, cooperation and communication skills by attending the 2021 Harvard College AUSCR Summit for Young Leaders in China (HSYLC), taking courses and working with students all over China together to finish a variety of tasks.

- Practiced Python programming and learned teamwork from Oct 15 to 17 in 2023, by taking part in the hackson, “Hack the Valley 8”, as a competitor and forming a four-people group with the destination of creating an app for customers to understand the menu better, facing the challenge of coordinating duties and assembling work from different people together.

- Got knowledge about building servers and designing front ends from Oct 15 to 17 in 2023, by attending workshops during “Hack the Valley 8”, trying to adapt strange programming language (Jave-script) and development environments for servers.

Certifications and Projects

- Second Prize in the National Olympiad in Informatics (NOIP2020) sponsored by China Computer Federation in 2020. (Algorithm competition with C programming)

- Programming project with paper, “An Automatic Lawn Sprinkler Irrigation System Based on Machine Learning” from 2021 - 2022.

- “I’MENU”, an app designed by Python and Java-script, for customers to make better choices when facing the menu in restaurants, based on OCR (Optical Character Recognition) and OpenAI from Oct 15 – 17, 2023.

- Data analysis project with paper, “Ministry of Colleges and Universities’ Research Project Investments in Toronto”, using R programming and some third-party libraries, based on a public dataset “ontario-research-funding-summary” from Ontario Data Catalogue, in April, 2024.

- UI/UX project, “MentorU”, an app interface developed by Figma, aiming to design a intelligent matching system for university students’ mentorship from May to August in 2024