Zhiyu Pan

Email : chloezhiyu.pan@mail.utoronto.ca
Mobile : +1-437-989-4570

Education

- **University of Toronto** Toronto, ON
  Specialist (Co-operative) Program in Computer Science; GPA: 3.68 *Aug. 2021 – Expected in 2025*
- **Related Courses**: Linear Algebra, Discrete Mathematics, Introduction to Probability, Software Design, Introduction to Machine Learning and Data Mining, Introduction to Numerical Algorithms for Computational Mathematics

Projects

- **System Monitoring Tool**
  A tool run on Linux that reports different metrics of system utilization.
  - Providing information including CPU and memory utilization, basic system architecture and user information.
  - Written in C and takes command line arguments to report various information formats.
- **System-Wide FD-Tables Tool**
  A C program displaying the tables used by the OS to keep track of open files, assignation of FD and processes.
  - Display FD tables owned by the current user, including the PIDs, FDs, file path and Vnodes.
  - Able to generate report and output data to file as user requests.
- **News Article Categorization Model**
  A machine learning model that can label news articles.
  - Built using Python and the Numpy libraries.
  - Use Gaussian Class Conditionals, k-Nearest Neighbors, and Naïve Bayes classifiers that are trained on the preprocessed data using cross-validation to prevent over-fitting.
- **Course Planning Application**
  An Android application to help students view provided courses and generate schedules for each semester
  - Allows students to view and select courses offered by their university and add them to their course schedule for each semester. And allow teachers to add or modify courses.
  - Core functionality of generating a timeline of courses which displays each course in the earliest session the student may take, according to restrictions on prerequisites and session offerings
  - Build using JAVA, used Android Studio for front-end design and Firebase cloud to manage users' information.

Experience

- **University of Toronto** Toronto, ON
  Teaching Assistant *Sep 2022 - Present*
  - Conducted weekly office hours and organized review sessions for Calculus for Management course.
  - Created and facilitated practice problems during review sessions to improve students' integration and differentiation techniques, resulting in positive feedback from students and course professors.
  - Provided individualized help to students by breaking down complex concepts into more manageable parts.

Skills

- **Languages**: Python, C, Java
- **Technologies**: Visual Studio, Eclipse, Android Studio, JIRA, Microsoft Office
- **Operating Systems**: Windows, macOS, Linux/Unix
- **Libraries**: Pandas, NumPy, Matplotlib, Scikit-Learn
- **Soft skills**: Bilingual in Chinese and English, creativity, collaboration, adaptability, leadership, conflict resolution and negotiation