UBC Science Co-op

T: 604.822.9677 | F: 604.822.9676 | science.coop@ubc.ca | www.sciencecoop.ubc.ca

Rang Xiao

Second degree in Computer Science, 3rd year
Bachelor of Science in Mechanical Engineering
Master of Engineering in Engineering Management
https://github.com/Ron-afk 778-317-4281 rangxiao21@gmail.com

TECHNICAL SKILLS

Language:	C, C++, Java, JavaScript, Python, PHP, HTML, CSS
Databases:	Oracle, SQL
Software:	VS Code, MATLAB, PyCharm, IntelliJ, WireShark
Mechanical Engineering:	CFD analysis; CAD drawing; Thermal-Fluid Design
Project Management:	Project Scheduling and Management; Risk Management; System Reliability Analysis

Project

CS Project

Fight Game 2023 Jul

- Using HTML and JavaScript built a 2 player fighting game
- Added animation for different character motion including move, jump, attack, and dead
- Deployed using GitHub pages
- Skills: HTML, CSS, PHP, Oracle, SQL

Personal Resume Webpage 2023 Jul

- Built a static personal web page containing resume information
- Set resume for download
- Deployed using GitHub pages
- Skills: HTML, CSS

League of Legends Season Database 2022 Dec

- Designed a database to store and search season information about League of Legend Championship
- Developed a web-based user interface using PHP, HTML, and CSS
- Developed a database to keep and manage input data using Oracle and SQL
- Skills: HTML, CSS, PHP, Oracle, SQL

Student Information File System 2021 Dec

- Use Java built a information management system to store students' information, including basic information, course history and planning, average calculation.
- Store student information in a list and preserve input data in JSON file
- Load data from JSON file to restore data.
- Using Swing GUI generate student's course plan for current term
- Skills: JAVA, SWING GUI package

Mechanical Engineering Project

Low-cost Adjustable Arm Prosthesis 2018 Apr

- Designed a low-cost adjustable arm prosthesis for simple grab and multi-conditional fitting
- Bending controlled hand is designed for light-weight lifting with lock mechanism
- Multi-conditional fitting designed for different injury condition ranging from palm lost to forearm lost
- Simple structure design for easy self maintenance

Research Project

Simulation of Robot Seeding using robotic arm 2021 Dec

- 3D modeling the process of picking and sowing seed using robotic arm with trajectory planning
- Generate and manage the arm trajectory for picking seeds and sowing on relative location on growth medium
- Generate robotic arm control code
- Simulate the seed sowing process

Work Experience

Technical Business Analytic, Acturis Canada 2023 Sep – present

- SQL development and database maintenance
- Insurance product development
- Product testing

Teaching Assistant (CPSC 213), UBC 2023 Jun – 2023 Apr

- Holding office hours to help students understand the course material
- Running lab sessions and leading students to solve lab questions
- Grading assignments and exams.

School Counselor, Maple Hill International Education 2019 Jan – 2020 Jan

- Student information collection and management
- Course planning based on the student's condition and wish
- Course schedule

Academic History

Bachelor of Science - Computer Science 4th yr Expected graduation May 2025

University of British Columbia

Area of study:

- Data Structures
- Algorithms
- Operating Systems
- Computer Vision
- Internet Computing
- Data Mining and Machine Learning

Master of Engineering – Engineering Management 2020 Sep – 2021 Dec

University of Alberta

Area of Study:

- Data analysis/Machine Learning/AI
- Data analysis/Machine Learning/AI
- Risk management
- System reliability analysis
- Financial condition analysis

Bachelor of Science - Mechanical Engineering 2014 Sep – 2018 Dec

University of Alberta

Area of Study:

- Force Analysis in Complex System
- Dynamics
- Mechanical Drawing in SolidWorks
- Mechanical Design
- Thermal Dynamics
- Fluid Dynamics
- Computational Fluid Dynamics
- Vibration
- Thermal-Fluid Sys Design