

Soua Yang

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GitHub: <https://github.com/popopo19> | itch.io: <https://zalk.itch.io>

EDUCATION

St. Olaf College, Northfield, Minnesota

Class of 2023

- **Anticipated Major:** Computer Science and Math with minor in Data Science
- **Relevant Coursework:** Algorithms and Data Structures, Advanced Linear Algebra, Probability Theory, Software Design (C++), Multivariable Calculus, Intro to Data Science, Hardware Design, Statistical Modeling, High Dimensional Data Analysis, Modern Computational Math, Mobile Applications, Electronics
- **GPA:** 3.68

COMPUTING ABILITIES

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- Video Game Development
 - Unity Game Engine, Construct 3
 - Git, SVN
 - ROS, Linux Terminal, Vim, React Native
 - Languages: Python, HTML+CSS, JavaScript, C++, C, R, SQL

TECHNICAL EXPERIENCES

Firmware Engineering Intern, Resideo

May 2022 – August 2022

- Programmed a python script to automate compiling multiple thermostat builds with different configurations
- Investigated thermostat issue related to Wifi within the FreeRTOS source code and provided documented findings
- Collaborated within a team of 3 to develop the UI for a thermostat in C/C++

Undergraduate Research, St. Olaf College

June 2021 – August 2021

- Worked in a team to filter out false cancerous mutations within cancer samples using Bayes' Theorem, non-matrix factorization, and R studio
- Simulated cancer samples for testing implementations
- Assembled all implementations into an R package call *excerno*

Drone Programming Contractor, TLC Precision

March 2021 – July 2021

- Played key role in a team to coding and troubleshooting of an autonomous drone to capture other drones
- Set up communication/MAVROS between the Pixhawk 4 flight controller and the onboard computer for autonomy
- Integrated realsense depth camera onto drone

Game Design and Animation Club President, St. Olaf College

September 2019 – June 2020

- Planned and managed weekly meetings
- Managed workflow during the game making process
- Self-taught on how to use the Unity Game Engine in C# to develop and run workshops to teach members on how to use it
- Developed the movement mechanics for a platformer game as well as dynamic obstacles for the player

St. Olaf Engineering Club Coding Lead, St. Olaf College

August 2019 - Present

- Implemented ROS and OpenCV in conjunction with the Pixhawk 4 flight controller on drone
- Documented work and created tutorials for how to use ROS and OpenCV
- Brainstormed and assigned tasks for the coding section of the competition