

Zachary Light

Education:

Bachelor of Science in Computer Science and Engineering (Anticipated May 2019)

3.03 GPA at University of California, Merced: Merced, CA

Relevant Coursework:

Algorithm Design and Analysis, Data Structures, Software Engineering, Object Oriented Programming, Operating Systems, Computer Networks, Image Processing, Robotics, Artificial Intelligence

Tech Skills: C/C++  Python  Git 
Java  ROS  nesC 

Related Projects:

mercedClassAlerts:

Python with JSON

A web crawler that sends an alert via email when there is a seat available in a class at UC Merced

- Parses HTML data to read open classes from the school website
- Utilizes multi-threading to allow the addition of classes and students mid-runtime
- Uses JSON to store requested classes, easily allowing for the addition of classes or students
- Ensures a sufficient wait time between requests to avoid putting stress on the school's server

Brick-Breaker:

C++ with OpenGL

A rendition of the classic game Breakout, done for my final project in Object Oriented Programming

- Utilizes Object-Oriented concepts I was able to create a dynamic and easily expandable game
- Uses OpenGL to draw graphics
- Used github for group collaboration and version control

Robotics-Maze/Treasure hunt

C++ with ROS

Final Project for my Robotics class

- Utilizes ROS concepts to allow a Husky Robot simulation to traverse a maze
- Uses the camera to find and define hidden objects in said maze
- Used github for collaboration and version control

Not Another Completely Heuristic Operating System (NACHOS)

Java, with some C/MIPS

Operating System simulator project, completed for my Operating Systems class

- Implemented Threads, and all of the functions that come with. E.g. join, halt, etc.
- Implemented paging, a form of memory management
- Implemented a version of TCP, and created a chat room on top of that implementation