zlight97.github.io

Cell Phone: 408-205-1497
zlight@ucmerced.edu

Zachary Light

Education:

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

---

Tech Skills:

C/C++	◆◆◆◆◆	Python	◆◆◆◆	Git	◆◆◆◆
Java	◆◆◆◆◆	ROS	◆◆◆	MATLAB	◆◆◆◆

Relevant Research:

Expansion of the Working Memory toolkit (January 2019 - Present)

Under Dr. David Noelle

Working Memory toolkit is a reinforcement learning AI library that emulates human working memory

- Used the toolkit to complete the Save Ignore Recall task (SIR)
- Working on a four room naviagtion task using a heirarchy learning system
- End goal is to create a fully functional hierarch of learning, working memory

Related Projects:

P2T (Picture 2 text):

Java for Android

A note-taking app allowing the conversion of slides to text, also allowing dictation to text. Holds a file organization, editing, and sharing system. A group project for a Software Engineering class

- Designed with UML
- Uses Google API for picture to text conversion
- File editor to allow manual correction of mistakes
- File directory system to allow easy organization
- Tested through internal tests, unit tests, stress tests, and application tests

BobcatClassAlerts:

Python backend with HTML5, PHP, and JSON

A website 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
- Uses PHP form submission to add classes mid-run
- 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

DouShouQi (Jungle):

C++ with freeglut

A rendition of the board game Jungle done for *HackMerced* 2019

- I lead our group to complete this project in a 36 hour event
- 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