Zachary Light

1210 Strawberry Dr. • Merced, CA 95348 **CELL PHONE** (408)-205-1497

zlight@ucmerced.edu https://zlight97.github.io

OBJECTIVE

Third year computer science and engineering major at UC Merced. As an outgoing individual, I am looking for a position where I can actively apply myself, and further develop my abilities as a programmer.

LANGUAGES

Java

Matlab

MIPS

• C/C++

• R

ROS

Python

• nesC

• Shell

EDUCATION

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

at University of California, Merced: Merced, CA

RELATED PROJECTS

Class Availability Alert System

Python

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

- Written using requests python library
- Dynamic, allowing for additional classes to be added without modifying any code
- Uses file I/O, and string parsing to accurately find and send correct data

Algorithms

C/C++

Written for a Data Structures and Algorithms class

- Used to learn runtime and memory efficiency for large data sets
- Various dynamic and greedy algorithms
- Graph algorithms

Network Development

nesC with Tossim

Written for a Networks class

- Includes flooding and linked state routing
- Implements a simplified version of TCP
- Has a simple chat room using its TCP implementation

Image Processing

MATLAB

Written for an image processing class

- Written various image processing functions:
 - o Halftoning using Floyd's method
 - o Image resizing using bilinear interpolation
 - o Histogram equalization
 - o Edge detection using special filtering
 - o Finding the most dominant line using Hough transformation