PAUL RODRIGUEZ

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EDUCATION

Master of Science in Computer Science   June 2019
University of California, Riverside

Bachelor of Science in Computer Science   June 2018
University of California, Riverside

PROJECTS

Product Safe   April - June 2018
· Designed an alcohol electronic safe with an authentication system and blood alcohol content test
· Programmed ATmega1284 micro-controller to drive Nokia LCD display, 4x3 matrix-style keypad, solenoid locks and bar load sensors
· Integrated finite state machines to separately control each peripheral as well as internal subsystems
· Efficiently calculated the user's BAC with a 5% tolerance level when compared to multiple BAC calculators

Wireless RC Car   October - December 2017
· Created a bluetooth controlled car with autonomous features such as auto-braking and obstacle avoidance
· Programmed multiple ATmega1284 micro-controllers to drive motors, sensors, joysticks and bluetooth modules
· Integrated finite state machines to drive the controller and car
· Efficiently transmitted bytes of data through USART by assigning each bit to control specific functionality in the car such as speed, direction, headlights, sensors, etc. rather than sending multiple bytes to control each function

Miniature Arcade Game   May - June 2016
· Designed and built a fully functional miniature arcade game incorporating both hardware and software
· Programmed ATmega1284 micro-controller to control LED matrix, 7-seg display, analog joystick and IR sensors
· Incorporated modular code for peripherals through finite state machines
· Recreated the games of Flappy Bird, Snake, and Dance Dance Revolution and included original content

SKILLS

· **Programming:** C++, C, Bash, Python, Java
· **Software:** Atmel® Studio 7, Xilinx
· **Operating Systems:** macOS, Windows, Linux
· **Languages:** English (advanced), Spanish (advanced)
· Understanding of network infrastructure with an emphasis on Cisco hardware

JOB HISTORY

Teaching Assistant | University of California, Riverside   September 2018 — Present
· Instructed lab section of 25 students in Intermediate Embedded & Real-Time Systems
· Presented students with lab assignments and verified correctness of assignments at the end of lab
· Assisted students in resolving issues and challenged them to provide efficient solutions
· Supervised student examination sessions and submitted student records to professor

AWARDS

Recipient of UC Riverside Chancellor's Scholarship   September 2014 - June 2018
Dean's Honor List   Spring 2015, Winter 2016, Spring 2017, Fall 2017