Zachery Van Es

27800 McBean Pkwy #377, Santa Clarita, CA 91354 (661) 644-2815 zachvanes@gmail.com

EDUCATION

Bachelor of Science in Computer Science

May 2018

Minor in Mathematics

California State University Channel Islands, Camarillo, CA

• Overall GPA: 3.2

Programming Coursework: Algorithms & Data Structures, Software Engineering, Operating Systems

Mathematics Coursework: Linear Algebra, Analysis of Algorithms, Probability and Statistics

Other Coursework: Artificial Intelligence, Mobile Robotics, Computer Graphics

EMPLOYMENT

Electronics/Computer Technician

August 2018 – Now

USA Exports to China

- Repair and refurbish electronics such as phones, computers, and game consoles
- Report and document common problems found during testing of products for increased proficiency
- Instruct others on optimal testing procedures and ensure workplace efficiency

SKILLS

- Programming Languages: C, C++, Python, Java, HTML, CSS, JavaScript, and SQL
- Skilled with Unity and Android Studio
- Ability to operate and Install Windows, Mac, UNIX, and LINUX
- Experienced with building and fixing Computer Systems
- Proficient in Microsoft Office, SPSS, and Adobe Creative Suite
- Knowledge on the use of websites such as GitHub, WordPress, and Google Docs
- Experience with 3D modeling with programs such as Maya and the OpenGL library
- Knowledge on software engineering techniques such as Agile and Waterfall

SOFTWARE PROJECTS

www.github.com/ZacheryThomasVanEs

Double Pendulum Simulation

- Developed a simulation of a double pendulum in motion for a set period of time
- Demonstrates the chaos theory by showing different results depending on input
- Variables such as length of pendulums, starting points, and time of simulation can be changed
- Produces a file of the simulation that can be viewed separate from the program
- Based around ocean waves and how their creation involves similar momentum
- <u>Utilized</u>: Python, Spyder, NumPy, SciPy, Matplotlib, MPEG-4

Obstacle Avoidance Robot

- Built a mobile platform that used an on board computer as a processor for my capstone project
- Programmed basic turning and motor functions
- Developed a program to detect incoming obstacles and adjust accordingly
- Will speed up and slow down depending on surroundings
- <u>Utilized</u>: C++, Arduino, PsoC, Servomotors, LIDAR