Jhensen Ray Agni

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Education
University of California, Riverside
*Bachelor of Science in **Mechanical Engineering** with a concentration in **Design and Manufacturing***

Naval Surface Warfare Center, Corona Division
Systems Engineer | *2019 – Present*
- Acting as a systems analyst providing the Navy fleetwide reliability, maintainability, and availability metrics assessment of Hull Mechanical and Electrical Power and Propulsion Systems.
- Utilized engineering analysis results of big data from 300+ ships to investigate readiness trends and drivers to determine the impact on mission readiness.
- Perform functional analysis and cost – benefit studies to determine proper allocation of resources, supportability, training, and funding of HM&E Power and Propulsion Systems.
- Resolved and maintained system level databases ensuring +90% reporting accuracy by maintaining data filters, filter files, and Reliability Block Diagrams.

Eotron LLC.
Product Development Intern | *2018 – 2019*
- Rapidly created parts and assemblies in SolidWorks for use in production that can be printed using 3D printers.
- Worked as a Design Engineer in a cross-functional product development team to develop innovative UVC products for the medical and food service industries.
- Identify patterns and relay findings back to the research and development (R&D) organization, and provided input to the product development process
- Tasked with designing and programming a UVC LED Sanitation Robot that will be implemented in the medical, food service, and private industries.

Projects
Crazyflie Micro UAV
- Implemented experience with Forward Kinematics, Perception, Positioning, and Motion Planning to develop obstacle avoidance algorithms and Occupancy Grid Mapping for Crazyflie 2.0 UAV
- Used Crazyflie Micro UAV as a development platform to improve programming knowledge of C++ and Python

TurtleBot Soccer Project
- Developed and tested Motion Planning and Trajectory Control algorithms in Python to push a ball into a goal-post, which resulted in the team winning first place out of 15 teams in path accuracy and speed.
- Utilized RViz and ROS to virtually simulate the motion of the Turtlebot running on Linux Ubuntu OS prior to physical application

Leadership Experience
Marine Corps Officer Candidate (ROTC)
- Acting as fireteam leader, led a group of Marine Corps Officer candidates through a series of land navigation and obstacle course drills during OCS Prep Weekend.
- Took accountability for each officer candidate, ensuring that the mission was understood, supervised and accomplished.

Skills
C/C++, Matlab, Python, HTML, CSS, Bootstrap, Arduino/Raspberry Pi Programming, Linux Ubuntu, Git, SolidWorks, Robotic Operating System(ROS), Soldering, Tooling/Machining