KELVIN JARAMILLO

PROFILE

Junior Mechanical Engineer with good experience in electronics and programming. Strong foundation in with MATLAB, Simulink, python and java. Good understanding of sensors, motor drivers and computer vision.

CONTACT

PHONE:
+31627903902

EMAIL:
kelvinpmejia@hotmail.com

INTEREST

- ROS (Robotic Operating System)
- Brushless motors (controllers and drivers)
- Dynamic systems
- Design and prototype
- Logic coding for robotic systems

EDUCATION

University of Twente
2019-2021/07
Bachelor Mechanical Engineering
Holland International Study Centre
2019/01 – 2019/06
Foundation Year
SENESCYT Full Scholarship
2018
Obtained a 960/1000 in the standard university entry test, which gave me the chance for a Full scholarship for my bachelor

EXPERIENCE

Mirror-manipulator
Feedforward control-Precision mechatronic system with an elastic guidance (leaf springs)-SOLDIWORKS for designing and Simulink for developing controllers
Robot to travel through maze
PID controllers **-** Distance sensors for self-guidance
Server-client Collecto board game (JAVA)
Client-Server Socket communication ○ Given SERVER and protocol to connect-UML diagrams for designing program
Collecto board game (PYTHON) with OpenCV integration
MinMax algorithm-Game developed with PyGame library-OpenCV to interact with game-multithreading used for synchronization
Robotic serial manipulator for SPE
2 DOF robotic manipulator with electromagnetic end effector. User interface with Unity to pick objects to be moved from one location to another. I made the controllers, design, prototype, software for communication and trajectory generation.
Cable driven robot for SPE
The 2 DOF serial manipulator was found not feasible for the SPE. Then I worked on a cable driven robot, that uses that same software, controllers and user interface, but using a parallel 2 DOF manipulator

SKILLS

Programming: Good foundation for: PYTHON/ JAVA/ MATLAB.
Languages used for project: C#, JavaScript/html, C++ (Arduino)
Modelling: SOLIDWORKS
Sensors/ Circuits and Electronics: 10 weeks course with practical exercises for sensors (distance, force, capacitive, resistance) and 1st and 2nd order electric circuits.