## Donipolo Ghimire

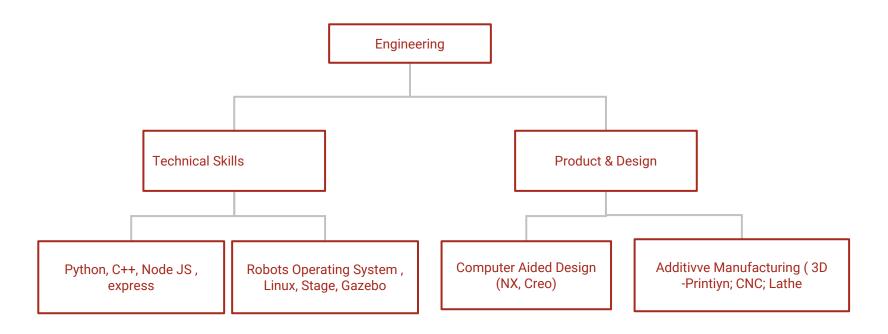
Engineer

#### **About Me**

I am a senior Mechanical Engineer at Howard University. As an Engineering student, who practices analysis, synthesis, observation, reflection and evaluation in a daily basis, I have acquired technical and soft skills to excel in the industry or any relevant fields. I am interested in Controls and Systems (Robotics), Implementing SLAM algorithms and developing Web Servers.

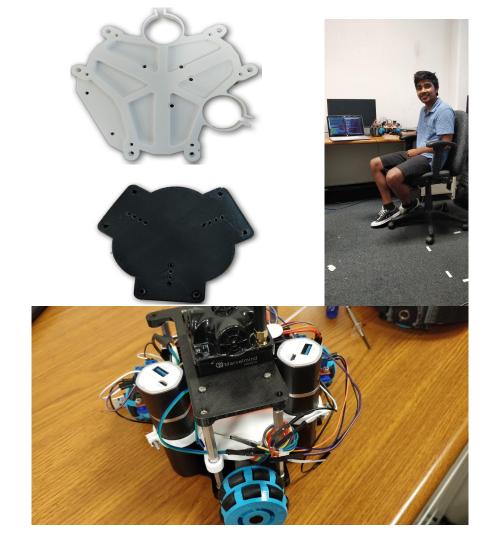


## **Skills And Expertise**



# MURO LAB, UCSD (Student Intern/Researcher

- Interned in Multi-Agent Robotics
  Laboratory.
- Was assigned to design, develop a working prototype of an Unmanned Ground Vehicle.
- 3D printed and assembled the parts
- Implemented Controls algorithms
  (Proportional Integral Derivative Control)
- Implemented Kalman Filter Algorithm for Localization.



### Capstone Project: Deliveroid

Designing and building an Autonomous vehicle to deliver documents and packages

Designed the robot using CAD software

Implement Hector SLAM

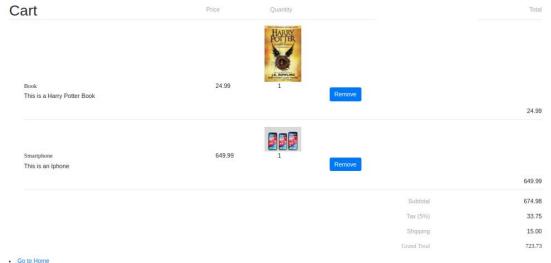
Implemented PRM (probabilistic ROad MAp ) algorithms

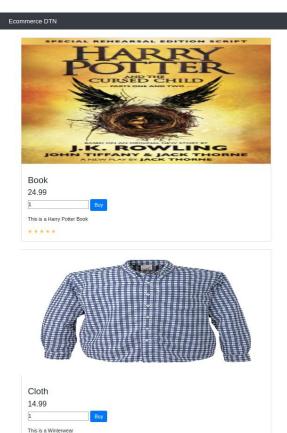


#### **DTN ION - NASA**

Developed a web server for Disruptive Tolerant Networking (DTN)

Use Node JS and Express as the web application framework





Home Logout Cart



# Junior Capstone: Sandia National

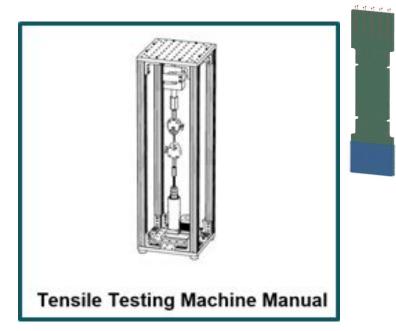
Laboratory

Designed CAD model for the tensile testing machine

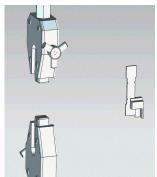
3D printed dog bones samples

Examined the variability material failure of a common aluminium alloy

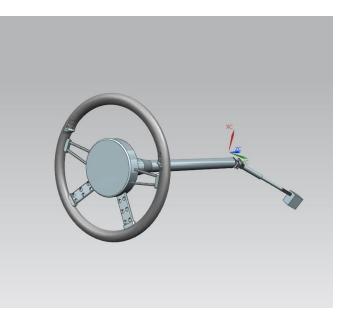
Tested different materials and assembled the testing machine







## **Additional projects**



Designed Steering Wheel System



Build a Tensile Testing Device



Machining to build a HU \_Bison Boat

#### **Club Activities**

- American Society of Mechanical Engineers,
  Howard Chapter Programs Chair
- Engineer Without Borders
- Society of Automotive Engineers
- Math Club, Howard University



#### **Contact Info**

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