# Pruthvi Sanghavi

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## Education

# University of Maryland

College Park, Maryland

Masters of Engineering in Robotics

anticipated: May 2021

Classes Taken: Statistical Pattern Recognition, Software Development, Path Planning, Computer Vision, Robot

Modeling, Linear & Nonlinear Systems, Network Control System (Swarm Robotics)

## LDRP Institute of Technology and Research

Gujarat, India

Bachelors in Mechanical Engineering

completed: May 2019

Classes Taken: Dynamics, Machine Design, Product Manufacturing, Thermodynamics

# Technical Skills

**Computer Language**: C++, Python, Matlab, HTML and XML | **Other platforms**: Git, ROS (Robot Operating System) **Simulation Platform**: Gazebo, Simulink, WeBots, Vrep, PyBullet, MUJOCO, Vissim, Anylogic, Unity, Robotarium |

Design: Autodesk Fusion360, SolidWorks, Creo Parametric | Data Modeling: Tensorflow, Pandas, Keras |

Cloud Technologies: Google Colaboratory, Amazon Web Services | Libraries: OpenCV, Numpy, Matplotlib, Scipy

# <u>Technical Experiences</u>

University of Maryland - Collective Dynamics and Controls Lab (CDCL) Supervisor: Dr. Derek Paley

**Research Assistant - REZOOM (Self Driving Scooter Startup team)** 

Jan. 2020 - Present

- Working on the design and fabrication of a Self Righting Mechanism appendage for two wheeled vehicles.

#### National Science Foundation - ICORPS

#### **Entrepreneurial Lead**

Supervisor: Dr. Derek Paley June 2020 - September 2020

- Conducted 33 interviews of the professionals in the shared electric scooter industry to collect insights and developed a scalable business model canvas.

**NewMind Robotics** 

Supervisor: Nathan George

#### **Robotics Engineering Intern**

- Developed an application to connect and control an autonomous robot outside the wifi range.

## Indian Space Research Organization

## **Summer Research Intern**

Jan 2019 - May 2019

June. 2020 - July 2020

- Applied ML techniques for the analysis of remote sensing data of the Indian rivers.

# **Projects**

Machine Learning: Face Recognition; Digit Recognition; 3D Object detection for Autonomous Vehicles

**Computer Vision: Lane Detection; Optical Tracker** 

Algorithms: A Star Algorithm; Dijkstra Algorithm; BFS Algorithm; Sorting Algorithm Visualizer