AHALYA MANDANA

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EDUCATION

Northwestern University

M.S. in Robotics, CGPA: 3.675/4

anticipated graduation: December 2018

M.S. Ramaiah Institute of Technology

June 2017

B.E. (Bachelor of Engineering) in Electrical and Electronics Engineering, CGPA: 8.59/10

PROJECT WORK

Baxter the Laundry Assistant

December 2017

- Final group project for ME-495 Embedded Systems in Robotics to perform a task with the Baxter research robot from Rethink Robotics.
- Wrote custom ROS nodes/services to make the Baxter research robot thread/unthread the lid of Tide bottle.
- Custom ROS subscribers/publishers were created to collect pose data of the lid, to send to the arm
- Project also included AR tag tracking, quaternion multiplication, and inverse kinematics.

Simulation of somersault on a trampoline

December 2017

- Simulated the motion of a person doing a backward somersault on a trampoline, using Mathematica
- Lagrangian dynamics and concepts of rotational inertia were also applied.

e-Yantra Robotics Competition, 2015 conducted by IIT, Bombay

February 2016

- Our four member team participated in this all-India robotics competition, organized by the Indian Institute of Technology, Bombay (IIT-B).
- Theme was Recyclable Waste Management and we successfully implemented the code using C programming on ATmega 2560 and ATmega 16A AVR microcontrollers.
- Group was placed among the top 10 teams, across India, in the Recyclable Waste Management category.

WORK EXPERIENCE

Electronics For You Group, Bangalore, Summer Intern

June 2016 - July 2016

- Internship involved writing articles based on expert talks from 'India Electronics Week 2016', interacting with industry experts to gather additional input for articles for the Electronics Of Things portal and 'Electronics For You' print magazine.
- Fields covered: Bluetooth Low Energy and Bluetooth Beacon Applications, Interoperable IoT Solutions, Renewable Energy Microgrids, Security of Things, Human Health IoT, Threat Perception and Attack Scenarios in Automotives.

INDUSTRY INVOLVEMENT

Summer Camp by Free Software Movement Karnataka (FSMK)

July 2014

- Attended a two-week residential Open Source coding workshop conducted by FSMK.
- Exposure to NodeJS, MongoDB, Mozilla Webmaker Tools

3D Printing Workshop by Li2 Innovations

March 2014

- Two-day workshop with exposure to Blender and Cura.
- Design of small objects using Cura, to use for 3D printing

Animation Course conducted by Cavalier Animation

March 2011

Two-month basic animation course covering Adobe Flash, Adobe Photoshop, and MonkeyJam software.

SKILLS

C Mathematica MATLAB
ROS (Robot Operating System) HTML Verilog
Rviz Git Assembly Language

Gazebo JavaScript CSS

Python MySQL PSPICE Simulation Software