

AHALYA MANDANA
ahalyamandana2018@u.northwestern.edu

PROFILE

M.S. in Robotics student, with an undergraduate background in electrical and electronics engineering.
Subject knowledge includes:

Robotic Manipulation	Linear Integrated Circuits
Embedded Systems in Robotics	Digital Signal Processing
Theory of Machine Dynamics	Advanced Industrial Automation
Artificial Intelligence	Digital System Design
Control Systems	Nano Fabrication and Characterization
Modern Control Theory	Power Electronics
Microcontrollers	Engineering Physics

EDUCATION

Northwestern University

September 2017 – present

Evanston, Illinois

M.S. in Robotics

CGPA (Fall Quarter): 3.675/4

M.S. Ramaiah Institute of Technology

August 2013 – June 2017

Bangalore, India

B.E. in Electrical and Electronics Engineering

CGPA(for 6 semesters): 8.57/10

Royale Concorde International School

March 2013

Bangalore, India

All India Senior School Certificate Examination

Central Board of Secondary Education

Marks: 95.2%

Royale Concorde International School

March 2011

Bangalore, India

All India Secondary School Examination

Central Board of Secondary Education

Marks: 10/10 CGPA

WORK EXPERIENCE

Summer Intern at *Electronics For You Group*, Bangalore

June 2016 - July 2016

The internship included the following:

- Writing articles based on expert talks from *India Electronics Week* 2016
- Interacting with industry experts to gather additional input for articles
- Using Wordpress CMS to publish articles at the *Electronics Of Things* portal
- Writing *Buyers' Guide* articles for *Electronics For You* print magazine

The summer internship included coverage of panel discussions and talks related to the following fields:

- 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

PROJECT WORK

1. **Baxter the Laundry Assistant - Final Project for ME-495 Embedded Systems in Robotics** (December 2017): Was part of a group project that wrote custom ROS (Robotics Open Source) nodes/services to make the Baxter research robot thread/unthread the lid of Tide bottle.

2. **e-Yantra Robotics Competition, 2015 conducted by Indian Institute of Technology, Bombay** (October 2015 – February 2016)

Our four member team participated in this all-India competition, organized by the Indian Institute of Technology, Bombay (IIT-B). It began in October 2015. The theme given to us was Recyclable Waste Management. We had to devise an efficient method to segregate the waste in a locality, using two robots, Firebird V (ATMEGA 2560 microcontroller) and Spark (ATMEGA 16 microcontroller). We successfully implemented the code using C programming and were placed among the top 10 teams, across India, in the Recyclable Waste Management category.

HONORS AND AWARDS

1. **Scholarship for Higher Education (SHE) from Government of India** (July 2013)

Was in the top 1 percentile of students in the Central Board of Secondary Education (CBSE) All-India Senior School Certificate Examination (Grade 12) results, and was judged to be eligible for a Rs. 400,000 scholarship for undergraduate studies.

2. **Best Outgoing Student award for the year 2012-13 in Royale Concorde International School, Bangalore, India** (February 2013)

OTHER EXPERIENCE

1. **Summer Camp by the Free Software Movement Karnataka** (July 2014)

Attended a two-week residential Open Source coding workshop conducted by the Free Software Movement Karnataka (in association with Mozilla) at Dayanand Sagar College of Engineering, Bangalore. The software that we worked with at the summer camp included the following: NodeJS, MongoDB, JavaScript, HTML, CSS. We were also introduced to the various Webmaker Tools provided by Mozilla Firefox.

2. **3D Printing Workshop by Li2 Innovations** (March 2014)

Attended a two-day workshop conducted by Li2 Innovations in M.S. Ramaiah Institute of Technology. The software that was taught to us during the workshop included Blender and Cura.

3. **Animation Course conducted by Cavalier Animation** (March 2011)

Completed a two-month basic animation course using Adobe Flash, Adobe Photoshop, and MonkeyJam software from Cavalier Animation.

COMPUTER PROFICIENCIES

- C
- JavaScript
- MySQL
- PSPICE Simulation Software
- HTML
- CSS
- Verilog
- MATLAB

- Octave
- Assembly Language Programming(ALP) for 8051 microcontroller
- Python
- ROS (Robotics Open Source)

CO-CURRICULAR ACHIEVEMENTS

- Member of the MSRIT college 4x100m Relay team that won gold at the VTU (Visvesvaraya Technological University) Meet held at Sir MVIT, Bangalore in 2016
- Member of the MSRIT college 4x100m Relay team that won gold and set the meet record at the VTU Meet held at JNNCE, Shimoga (the team currently holds the VTU record for 4x100m) in 2013
- Part of the MSRIT Women's college basketball team in 2013-14
- Shortlisted for the last 40 in the Times Scholar program conducted across India by Times of India in 2012
- Participated in the CBSE (Central Board of Secondary Education) National Athletics Meet held in Delhi Public School, Meerut in 2011(placed 5th in the finals for 100m)
- Sports Captain for the academic year 2011-12 in Royale Concorde International School, Bangalore

HOBBIES

- Reading
- Writing and performing poetry
- Singing
- Piano
- Guitar
- Athletics

LANGUAGES

- English
- Kannada
- Tamil