Shasa Antao

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EDUCATION

AMRITA UNIVERSITY
B.Tech Mechanical Engineering
Bangalore, Karnataka India

August 2013 - May 2017
Cum. GPA: 3.20/4.00

WORK EXPERIENCE

PRODUCT DEVELOPMENT ENGINEER | Robert Bosch Engineering & Business Solutions Pvt. Ltd. | September 2017 – Present | Coimbatore, India

- Principle investigator for Innovation projects within the New Product Development team
- Applying Business model innovation and Customer Development techniques to potential ideas
- **Current Project:** Development of a Deep Learning based Aerial Crop Protector that can identify and precisely spray weeds
- **Current Project:** Setting up an Internal start-up incubated at Bosch using a customized accelerator program from University of California, Berkeley
- **Current Project:** Design of an Innovative knee support device using multiple stratified spiderweb-like structures
- **Current Project:** Formulation of a Deep Learning algorithm in an Intelligent health companion to track changes in facial features and predict health problems
- Submission of above three projects as Invention reports which are in the process of review for patenting

UNDERGRADUATE RESEARCHER | Amrita University | February 2015 – July 2017 | Bangalore, India

- Successfully validated passive balancing using counterweights in a prototype of a novel orientation sensing mechanism
- ***Publication:*** "Applications of a 3-Revolute Orientation Sensing Mechanism (3-ROSM) in Controlling a Camera"; ***Antao, S. A.*** , Nair, V. S., Chittawadigi, R. G., 5th IFToMM International Symposium on Robotics & Mechatronics (ISRM2017), Sydney, Australia ,(2017)
- ***Publication:*** "Methodology to Determine Counterweights for Passive Balancing of a 3-R Orientation Sensing Mechanism using Hanging Method"; ***Antao, S. A.*** , Nair, V. S., Chittawadigi, R. G., 18th National and 3rd International conferences on Machines and Mechanisms (iNaCoMM2017), Mumbai, India ,(2017)
- ***Publication:*** "Passive Balancing of a Novel 3-R Orientation Sensing Mechanism"; ***Antao, S. A.*** ,Vishal, S., Rajan, S., Nair, V. S., Chittawadigi, R. G., 8th Asian Conference on Multibody Dynamics (ACMD 2016), Kanazawa, Japan ,(2016)

PROJECTS

3-REVOLUTE ORIENTATION SENSING MECHANISM | SENIOR DESIGN PROJECT | January 2017 – May 2017

- Design, fabrication & application testing of prototypes to validate the theory of the Manipulator Concept

COMPREHENSIVE STUDY OF BURR REDUCTION | INTERNSHIP | TOYOTA KIRLOSKAR MOTORS | June 2016

- Studied quality issues caused by Burrs in Automotive Underbody Division and Proposed solution based on 'Karakuri Kaizen' to reduce occurrence of Burrs

MEMBERSHIPS, AWARDS AND ACHIEVEMENTS

- Vice President of Membership in 'Jinsei Dojo' – sole Japanese toastmasters club in India |July 2016 -December 2016
- Secured the first place in Healthcare Innovation Competition at Bosch for the Innovative knee brace
- Secured third place in the Healthcare Innovation Competition at Bosch for Intelligent Health Companion
- Secured third place in a Department competition at Bosch for building a quadcopter. Received a commendation on best design for the same

TECHNICAL SKILLS

OpenCV · TensorFlow · Anaconda · Python · C++ · ROS (Robot Operating System) · Linux · ANSYS · ADAMS · SolidWorks 2017 · Autodesk Inventor 2016 · Seimens NX 11 · AutoCAD · Microsoft Office

LANGUAGE SKILLS

English (Native Proficiency) · Japanese (Advanced Proficiency) · German (Basic Proficiency)