accesstomadhu@gmail.com
Cell: +91 7899300980
Venkupalem,Ponnalur
Prakasam, A.P523109

Madhu Babu V

OBJECTIVE	I am seeking a competitive and challenging environment, which makes me to think beyond and which helps me to add a unique dimension to my life both professionally and personally.		
EDUCATION	**Bachelor of Technology**	**Rajiv Gandhi University of Knowledge Technologies , R.K Valley** CGPA : 8.88 Mechanical Engineering	May- 2016
WORK HISTORY	**Developer**	**CTO Innovation Labs, Tata Consultancy Services**	July-2016*
	Summer Researcher	**Robotics and Intelligent Systems Laboratory IIT Kharagpur** Advisor : Prof Dr. C.S Kumar Summer Research Internship	May- 2015

PUBLICATIONS

Madhu Babu V , Vamshi Krishna U, Shehensha SK, "*An Autonomous Path Finding Robot Using Q-Learning*" in IEEE XPLORE   through proc of 10th *International Conference on Intelligent Systems and Control*, Volume 2 January 7-8 2016 India.

Madhu Babu V, G V V Surya Kiran , SK Sameer, RoshanHota, C.S Kumar ,"*Stabilization of posture of humanoid in Gazebo using ROS*" in SPRINGER through proc of 28th *international conference on CAD/CAM, Robotics and FOF 2016*, January 6-8 2016 India.

INTERNSHIPS

Stabilization of IIT KGP humanoid by Reinforcement Learning ,   May -2015
Advisor : Prof Dr. C.S Kumar
Robotics and Intelligent Systems Laboratory IIT Kharagpur.
- Developed a heuristic learning algorithm named Q learning to stabilize biped on single leg.
- Developed a PID controller to controller the error in joint position while accessing the gait

UNDER GRADUATE THESIS

Design of Dynamically Stable Gait Using Grid Solvers   Dec-2015
Advisor : Imran Shareef
Rajiv Gandhi University of Knowledge Technologies, R.K Valley.
     Developing a dynamically stable gait which can walk like human gait. We have adopted for Grid Solvers for deriving optimal hip trajectory without any prior knowledge about the environment. Designed foot trajectory using cubic spline interpolation, used LMA for inverse kinematics. Extracted the hip trajectory with using grid solvers and spline interpolation.

RESEARCH PROJECTS

Path and Motion Planning for AR Drone 2.0 Using Stereo Imaging   Oct-2015
Advisor : Mohammad Rafi
Rajiv Gandhi University Of knowledge Technologies R.K Valley.
     Generating depth maps using stereo imaging techniques and using the depth, planning the path and motion in a cube (build with all length, width and depth) in order to reach the goal in a complete unknown environment.

Human Following UAV using Face Tracking with AR Drone 2.0   Feb -2015
Adivisor : Varun Kumar
Rajiv Gandhi University Of knowledge Technologies R.K. Valley
     Using viola jones algorithm, detected the faces from the images, and developed a PID controller for drone to align at exact center of the face. We adopt for ROS for all the communication and interface.

Design of Autonomous Arduino based Quad Copter   Dec - 2014
Rajiv Gandhi University of Knowledge Technologies R.K Valley
     Designed an autonomous Arduino based quad copter which can take off, hover and land autonomously. We had integrated this arduino with ROS for further heavy operations

RELEVANT PROFICIENCIES	**Programming Languages** : C,C#, Java,python **Database :** Sql Server **Software :** ROS, Gazebo, Open CV, Altair Hyper Works **CAD Software**: Solid Works **Hard Ware** : Arduino, Raspberry PI **Operating System** : Windows, Linux/Unix

WORKSHOPS	**Workshop On Quad Copters** By Robo Tryst (Robo sapiens Pvt. Ltd), RGUKT R.K valley	Feb -2015
	Workshop On IC Engines and Transmission System SRFMT & TI, Ananthapur, A.P	Dec -2014

OUT REACH AND SERVICE	**Student Coordinator** Robotics Club, RGUKT R.K Valley	July - 2015-May 2016
	Event Coordinator ABHIYANTH'15 National Level Techno- Management Fest, RGUKT R.K. Valley	Mar - 2015
	Event Coordinator Zonal Rounds of Robo Tryst	Feb -2015
	Event Coordinator VIPRASTHA'14 College Level Fest RGUKT, R.K Valley	Sept -2014
	Technical Student Volunteer (2) [1]Election Management, District Magistrate Chamber, Kadapa. [2]Election Management, District Magistrate Chamber, Ananthapur	2012&2014

ACHIEVEMENTS	**Best Project** Award for Drony, RGUKT, R. K valley	Jan -2016
	Secured National Means-cum-Merit *Scholarship* Scheme (NMMSS)) By Ministry of Human Resource Development India.	2009-2013
	TirumalaTirupathDevasthanam **Scholarship** By Sri VenkateswaraVidhyadana Trust	2010 -2016

REFERENCES	Available upon Request *