

Nirav Patel

Objective

Summer internship in the field of automation, computer vision and robotics engineering.

Education

Dec 2015 (expected)	PhD, Robotics Engineering. Worcester Polytechnic Institute, Worcester MA.	GPA 3.66/4
May 2007	M.Tech, Computer Science and Engineering Nirma University of Science and Technology, Ahmedabad, India	GPA 7.94/10
May 2005	Bachelor of Engineering, Computer Engineering North Gujarat University, Patan, Gujarat, India	GPA 3.86/4

Courses

Digital Signal Processing, Signals and Systems, Digital Image Processing, Computer Vision, Engineering Mechanics, Elements of Mechanical Engineering, Foundation of Robotics, Systems Engineering, Robot Dynamics, Motion Planning, Biomedical Instrumentation*, Introduction to Control of Nonlinear Dynamical Systems*.(*Pursuing)

Professional Experience

Jun-2010 -June2011	Nirma University of Science and Technology, Ahmedabd, India
	<ul style="list-style-type: none">➤ Taught embedded systems, digital electronic, design of operating systems, computer graphics at undergraduate level➤ Involved in technical symposium as judge and guide.
Feb 2008 -Aug 2009	ABB - Indian Corporate Research Center, Bangalore, India
	<ul style="list-style-type: none">➤ Automated Thread Local Storage: Feb 2008-Aug 2008<ul style="list-style-type: none">• Developed of a tool for automated source code modification of Python language for automatically converting all global variables in a given C file to thread local variables.➤ Fieldbus Testing, Sept-2008-May 2009<ul style="list-style-type: none">• Played key role in establishing Fieldbus testing capabilities and Lab setup at INCRC. Transferred testing of various field buses like DeviceNet, Profibus, ProfiNet, Interbus and Ethernet I/P from Swedish CRC.➤ Paint Powerpack, May 2009-Aug 2009<ul style="list-style-type: none">• Developed three functionalities for Paint Powerpack(1)Modify Spray Angle, (2) Modify Position-Orientation and (3) Virtual fluid device .
Aug 2007 -Feb 2008	Hewlett Packard, Bangalore, India
	Developed a JAVA/J2EE module which enables HP customers to purchase Printer consumables online and helps HP to maintain their product information.

Academic Projects

- Setup of Interactive manipulation stack for PR2 robot at ARC Lab-WPI

- Setup of daVinci research system at AIM Lab-WPI
- Developed Gazebo-ROS based simulation for daVinci surgical system
- Developed control software for Prostate Brachytherapy robot.

Achievements

- Received Gold Medal for the Best Student Award of M.Tech 2007 batch from Nirma University of Science and Technology.
- Won First prize for presenting project on C++ Robot at Convergence-2003 at U .V. Patel College of Engineering , India.
- Won First prize for presenting project on C++ Robot at Technigma-2003 at Sankalchand. Patel College of Engineering, India.

Publications

Two legged Robot Design, Simulation and Realization, 4th International Conference on Autonomous Robots and Agents, Feb 10-12, 2009, Wellington, New Zealand.

Skills

Programming C, C++, JAVA, J2ME, MATLAB, ROS,
Tools Gazebo Simulator, ABB Robot Studio, Robview 5, ANTLR parser generator.