

Technical Summary

Myself Ashutosh Natraj, an enthusiastic Engineering professional, **B.Tech** (Bachelor of Technology in **Electronics & Instrumentation**), Pursuing **Masters** in **Computer Vision & Robotics** Under European Commission's Erasmus Mundus scheme.

Career Objective

Objective of my career is securing significant position to contribute to the best of my capabilities in the progress of my Organization.

Motive of life: Follow your instinct, don't fear experimenting.

Technical Expertise

Primary Skills	C,C++(oops) (Working knowledge)
Application s/w	Lab View 7.1(National Instruments), Matlab & Simulink ADSP kit & GNU-LPK FPGA Celoxica uClinux for Blackfin Java (working knowledge)
Operating Systems	Windows & Linux, uClinux

Academics Detail

Qualification	Passing Year	Percentage
MSc (Vision & Robotics)	Pursuing(2009)	76.5% until 2 nd sem
B.Tech (EIE)	2006	8.6 / 10 Distinction

Employment Summary

Organization	Duration
Smart Light Devices LTD, UK	July 08 till Sep 08
IBM – India Software Research Lab	June 06 till Aug 07
Technische Universitat Dresden for their Client Alcatel	Jan 06 till May 06

Projects Worked On

European commissions frame 7 research “ REPLICATORS” http://www.replicators.eu/	
Duration	Currently working
Client	European Commission, based at Sheffield Hallam Research centre
Description	Detailed description can be found on the website. www.replicators.eu
Personal Role	<ol style="list-style-type: none"> 1. Developing vision algorithms in the uClinux operating system (http://www.uclinux.org/) for the Blackfin processor, 2. The hardware and software development of a vision board based on the Neuricam NC1503 chip 3. Optimization of algorithms for Swarm implementation

“Pocket 3D” handheld 3D reconstruction on PDA	
Duration	October- December 2008
Description	The PDA was used to grab the image and do the 3D reconstruction of the object, using Laser triangulation method. Terminated at offline 3D reconstruction.

3D Reconstruction of pipeline in Petroleum industry using Smart PIG	
Duration	July till September 1 st week 08
Client	Smart Light Devices LTD, Aberdeen , UK
Description	Enhancement of the 3D Reconstruction of Pipeline in petroleum industry using Smart PIG, implementing the Laser triangulation method for 3D reconstruction.
Personal Role	Incorporating the enhancements

“Real time tracking of hand and counting of fingers displayed” on FPGA ,RC-10 board (using Celoxica and pixel stream (handle C)	
Duration	April- June 2008
Description	Task to track the hand from the background in the bounding box and to count the number of fingers being displayed in real time application on the FPGA ,RC-10 board using the Celoxica & pixel stream software (handle C).

“e-puck” wi-fi robot for accomplishing defined tasks also simulating the results on Webot	
Duration	April- June 2008
Description	Task handling of obstacle avoidance, and reaching the goal in undefined as well as in pre defined maps. And in unknown environment and unknown initial point as final task. The same to be simulated in the “webot simulator for the e-puck robot”

Target Detection and tracking & Edge detection in images for scene segmentation	
Duration	March till April 08
Client	Universitat de Girona ,Spain
Description	Detecting the targets in our case Balls and tracking them with changing frames
Personal Role	Developing the code and logic behind it.

IP based multimedia Subsystems	
Duration	Sep 06 till Aug 07
Client	IBM - Software research Labs
Description	Incorporating various IP based multimedia sub systems in to next generation mobile devices.
Personal Role	Involved in the Research & development.

Network Optimization Of hybrid Broadband Access network	
Duration	Jan06 till May 06
Client	Germany (Technische Universität Dresden) Client Alcatel
Description	Network Optimization of hybrid broadband Access network using GNU .Linear programming kit
Personal Role	Involved in the Research & development.

Hands Free Dialing for disabled (VI-Mantra-2004)Selected among top 25 Projects of the year	
Duration	May 04 – Aug 04
Technologies /Platforms	National Instruments Labview software/ purkinge image technique.
Description	Its like boon to the disabled who cannt do there daily task on their own. Its like bringing the humans long awaited interest of controlling equipments with their gaze. It works on the “ Purkinge Image technique” to control the functionality of the automated equipment by user’s gaze at it. One has to look and control its switching on and off of it. Still progress to be made for better utility.

Path Finder Robot	
Duration	Dec 04 - April 05
Technologies /Platforms	Lab view 6.1 & C language
Description	It's the prototype of Pathfinder which can be of utmost use during the situation of calamities like Earthquake and Fire in residential places where we can't risk the life of fire fighters unless knowing any evidence of survivors, So here comes in action the pathfinder which shall be installed with a camera to transmit images and will let us know about the survivors under the debris where humans nor dogs can get in to check can be known and so swiftly the work can be carried out in saving valuable life.

Institute for Plasma Research (IPR , Bhat Gandhinagar ,India)	
Project name : Automation of CCD camera for Tokamach	
Duration	Mar'05 (3weeks)
Technologies /Platforms	Visual Basics
Description	Automation of CCD camera installed in the Tokamach, where we need to take the spectroscopic study of the Plasma generated for a fraction of second, for knowing its valuable information on the basis of the spectrum observed during the shots taken for generating the plasma, So it was to develop totally user friendly dash board to operate its function automatically and save every new shot in different consecutive files for later study purposes.

Education (Academics):

Msc Vision & Robotics (2007 -2009) under European Commissions Erasmus Mundus scheme: Currently pursuing: Semester 3, **Aggregate: 76.53%** until 2nd Semester.

Universities attending:

1. Heriot Watt University ,Edinburgh , United Kingdom. Semester 1
2. Universitat de Girona , Girona , Spain. Semester 2
3. Universite de Bourgogne , le Creusot , France. Semester 3

Subjects covered : Data mining, Machine learning, Real time imaging & FPGA, Visual Perception, Autonomous Robotics , Fundamentals of Robotics, Scene segmentation and interpretation, Pattern recognition,

B.Tech (2002-2006) form **Vellore Institute Of Technology (VIT)**, Vellore, T.N

GPA Grades:

Aggregate: 8.6 / 10 CGPA

Semesters and GPA Grades	
Sem Seventh:8.53	Sem Eighth: 9.6
Sem Fifth:8.19	Sem Sixth:8.2
Sem Third:8.19	Sem Fourth:8.71
Sem First : 7.75	Sem Second:8.5

School:

Class	School	Board	Percentage
12th	Kendriya Vidyalaya (ONGC), Ahmedabad	CBSE	75.0%
10th	Kendriya Vidyalaya (ONGC), Ahmedabad	CBSE	82.8%

LIST OF ACHIEVEMENTS

- European Commission's Erasmus Mundus scholarship (1 among 25 selected in the world for the scholarship worth 42,000 €)
- Intra-University Robot competition,UDG,Girona, Spain,2008.
- National Mathematics Olympiad contest-Junior Level :62%
- National Mathematics Olympiad contest Senior Level :60%
- National Science Olympiad:2000,2001,2002
- Ministry Of Parliamentary Affairs "National Youth Parliament" stood 4th .
- HFI-Talent search Exam 1998- 2nd in district
- NTSC(Central Institute Of General Knowledge) :1999

Got a Cash prize and free software from "National Instruments INC"

Have a collection of around about 110 certificates in different skills, including proficiency in academics .

EXTRA CURRICULAR ACTIVITIES

- Attended workshop on Virtual Instrumentation
- The 3rd Gujarat State Ranking Table-tennis tournament-6th
- Permanent Colour Contest- 1st prize
- Actively Managed Departmental Symposium

Have been Vice-President of my university for the year 2005-2006.

Personal Details

Date of Birth	Sep 30, 1985
Sex	Male
Address	Ashutosh Natraj 136, Queens Road, S2 4DH Sheffield, United Kingdom
Phone	+44 7794427664
Email	ashutosh.natraj@gmail.com , an95@hw.ac.uk
Passport	F5009231 (Indian)
VISA	UK resident permit until 2010, Spain until 2009

Information mentioned above is true to the best of my knowledge.

References would be provided upon request

Name: Ashutosh Natraj

Place : Sheffield, UK