UTTAM GRANDHI

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EDUCATION

Master of Professional Studies   9/2013 - current
Interactive Telecommunications Program
Tisch School of Arts
New York University

Diploma   7/2010 - 12/2010
Digital Character Animation
Vancouver Film School

Master of Science + Bachelor of Engineering (dual degree) 8/2005 - 6/2010
Physics + Mechanical Engineering
Birla Institute of Technology & Science (B.I.T.S) - Pilani

THESIS

Learning Based Approaches for Visual Control of Redundant Manipulators   2010
Guide: Dr. Laxmidhar Behera, Professor, Dept. of Electrical Engineering
IIT-Kanpur
- Calibrated the robot's visual space using Tsai Camera Model
- Simulated and performed learning experiments on a 7-DOF robotic arm

ACHIEVEMENTS

Michelangelo, sketching robot won a silver at ROBOGAMES, San Francisco   2009
Responsibilities: Design, Manufacturing, Assembly.(Team of 2)

Cyborg, mixed media sculpture, won a bronze at ROBOGAMES, San Francisco   2009
Responsibilities: Design, Manufacturing, Assembly and Logistics.

WALL-E, dancing robot, secured 1st position at TECHFEST, IIT-Bombay   2009
Responsibilities: Design, Manufacturing, Assembly and Painting. (Team of 2)

Secured 3rd/50+ teams in hovercraft racing competition at SHAASTRA, IIT-Madras   2007
Responsibilities: Design, Manufacturing and Logistics. (Team of 5)

Chi-Robot, A 6 DOF Manipulator, top 10/80+ teams at SHAASTRA, IIT-Madras   2008
Responsibilities: Design, Manufacturing, Assembly and Logistics. (Team of 3)

Biped, An 8-DOF Biped participated in the final round of the International Legged Robot
Competition at TECHFEST, IIT-Bombay   2009
Responsibilities: Design, 3D printing, Assembly and Logistics. (Team of 4)

SKILLS

Web: HTML5, CSS3, Javascript
Graphics: Adobe Photoshop, Inkscape
Video: Adobe Premiere, Adobe After Effects
Programming Languages: C, Processing
Physical Computing: Arduino
Crafts: Paper Engineering, Sculpting Blue Foam, Mould making, Wood working
Fabrication: Conventional machine tools, Power hand tools, Laser Cut, 3D Printing

TALKS

Introduction to Data Visualization and Processing   7/2012
at The Fifth Elephant, Bengaluru
http://goo.gl/0uYg4q

WORK EXPERIENCE

Graphic/Web Designer   1/2013 - 6/2013
Airpush Inc. Pvt. Ltd, Bengaluru
- Drastically enhanced the UI/UX for advertiser and developer portal using Adobe Photoshop, HTML and CSS.
- Designed and created MRAID compatible Ads for Mobile and Tablets using Adobe Photoshop, HTML, CSS3 and Javascript.
- Created a prototype of MRAID Web Tester using HTML5, CSS3 and Javascript.

Artist   7/2011 - 1/2013
Artoo I.T. Solutions Pvt. Ltd., Bengaluru
- Created a website from scratch using HTML5, CSS3 and JQuery
- Completely revamped the UI of the web application using HTML5, CSS3 and JQuery
- Implemented elegant visualizations using Backbone.js , d3.js and Google Maps API
- Illustrated numerous graphic elements for the Web and Android
- Established an internal standard for documentation and iterative development of a website
- Created animated videos using Photoshop & After Effects
- Designed and Illustrated promotional bookmarks, brochures and stickers

Intern   7/2009 - 12/2009
Larsen & Toubro, Coimbatore
- Performed Value Stream Map analysis for the processes of a 5-axis vertical milling center
- Implemented Lean Manufacturing concepts like Five S, Kanban and Poke-Yoke in CNC Machine Shop

Intern
National Thermal Power Corporation Ltd., Ramagundam   5/2007 - 7/2007
- Researched the functioning of steam bypass lines and digital control & monitoring systems
- Gained insights on industrial operations, instruments, maintenance & functioning of a Power Plant

PROJECTS

Development of a 3 DOF sketching robot   2009
Birla Institute of Technology and Science, Pilani
- Designed & fabricated a sketching robot that delineates portraits by drawing curves under the guidance of Dr. B. K. Raut, Associate Professor, Mechanical Engineering Division

An extensive study on aspect ratios of RIE profiles on single crystal silicon   2009
Central Electronics Engineering Research Institute, Pilani
- Proposed a novel fluid dynamic model to explain the phenomenon of Reactive Ion Etching (RIE) - Lag in deep etching (used for isolation) under the guidance of Dr. G. Eranna, Scientist 'F', Sensors and Nanotechnology Group

Dry Etching Techniques   2008
Central Electronics Engineering Research Institute, Pilani
- Etched a unique square spiral pattern using RIE on a 2-inch single crystal silicon wafer. Also performed photolithography and characterization using Optical Microscope and Scanning Probe Microscope under the guidance of Dr. G. Eranna, Scientist 'F', Sensors and Nanotechnology Group

Design of a 6 DOF robotic arm   2008
Birla Institute of Technology and Science, Pilani
- Designed & fabricated an industrial class manipulator that can maneuver obstacles to pick objects of different shapes and sizes

PUBLICATIONS
Design of a Robotic Accessory for Abdominal Surgery   5/2010
Dr. R. Bhavani Rao, Uttam Grandhi
Hamlyn Symposium on Medical Robotics, London, UK

Michelangelo: A 3-DOF Sketching Robot   3/2010
Ravi Shankar Ippili, Uttam Grandhi, [et.al]
International Conference on Robotics and Intelligent Sensors, Nagoya, Japan

EXTRA CURRICULAR ACTIVITIES

Visualized a microphone's input using processing at Digital Organic   2012
A pool organized by Lucid [http://goo.gl/tuOt0]

Member, Lucid (A studio for speculative art [http://lucid.net.in]   2012
Analyzed artistic texts in the areas of New Media and Design, Bengaluru

Exhibited digital works, paintings & sculptures at "Galleria" during APOGEE 2008

Joint Co-ordiantor, BITS Physics Society [http://goo.gl/Fs2ed9]   2008
Designed posters and organized events during APOGEE

Senior Core Member, Creative Activities Club, BITS-Pilani [http://goo.gl/KLOYyQ] 2007
Contributed to 20" x 20" sketching & painting panels for OASIS

Publicity Co-ordinator, Andhra Samithi, BITS-Pilani [http://goo.gl/VA54rD]   2007
Designed and implemented innovative methods of advertising using print media for various cultural programs