

UTTAM GRANDHI

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EDUCATION

Master of Professional Studies, Interactive Telecommunications Program
New York University, USA, Tisch School of Arts
9/2013 - current
Look forward to creating large scale interactive sculptures / installations.

Master of Science + Bachelor of Engineering (dual degree), Physics + Mechanical Engineering
Birla Institute of Technology & Science, Pilani,
8/2005 - 6/2010

ACHIEVEMENTS

Michelangelo, sketching robot won a silver medal at ROBOGAMES, San Francisco, California, 2009

Responsibilities included Design, Manufacturing & Assembly. (Team of 2)

Cyborg, mixed media sculpture, won a bronze medal at ROBOGAMES, San Francisco, California, 2009

WALL-E, dancing robot, secured 1 st position at TECHFEST, Annual technical festival of IIT-Bombay, 2009

Responsibilities included Design, manufacturing, assembly, painting & logistics. (Team of 2)

Secured 3rd position out of 50+ teams in the event "Fire n Ice", hover craft racing competition at SHAASTRA, Annual technical festival of IIT-Madras , 2007

Responsibilities included Design, manufacturing & logistics. (Team of 5)

Chi-Robot, A 6 DOF Manipulator, has been declared as one of the 10 finalists out of 80+ teams in "Get A Grip" at SHAASTRA, IIT-Madras, 2008

Responsibilities included Design, manufacturing, assembly & 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 included Design, 3D printing, assembly & logistics. (Team of 4)

PROJECTS

Development of a 3 DOF sketching robot

Birla Institute of Technology and Science, Pilani

Self

Project Student

Designed & fabricated a sketching robot that delineates portraits by drawing curves (under the guidance of Dr. B. K. Raut., Associate Professor)

An extensive study on aspect ratios of RIE profiles on single crystal silicon

Central Electronics Engineering Research Institute, Pilani

Self

Project Student

Proposed a novel fluid dynamic model to explain the phenomenon of Reactive Ion Etching (RIE) - Lag in deep etching (under the guidance of Dr. G. Eranna, Scientist 'F')

Dry Etching Techniques

Central Electronics Engineering Research Institute, Pilani

Self

Project Student

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')

Design of a 6 DOF robotic arm

Birla Institute of Technology and Science, Pilani

Self

Project Student

Designed & fabricated an industrial class manipulator that can maneuver obstacles to pick objects of different shapes and sizes

THESIS

Learning Based Approaches for Visual Control of Redundant Manipulators, IIT-Kanpur, 2010
(under the guidance of Dr. Laxmidhar Behera)

- Calibrated the robot's visual space using Tsai Camera Model
- Simulated and performed learning experiments on a 7-DOF robotic arm

WORK EXPERIENCE

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

Intern

Larsen & Toubro, Coimbatore

7/2009 - 12/2009

- 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

Designer

Artoo, Bengaluru

4/2011 - 1/2013

- 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

SKILLS

Manufacturing

Sculpting, Drilling, Sawing, Bandsaw, Power tools.

Web

HTML5, CSS3, Javascript

Design

PTC Pro Engineer / Creo, Adobe Photoshop, Inkscape

PUBLICATIONS

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

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

TALKS

Introduction to Data Visualization and Processing - Uttam Grandhi
The Fifth Elephant, 7/2012
<http://goo.gl/0uYg4q>

PERSONAL

Gender	Male
Date of Birth	9/11/1987
Marital Status	Single
Nationality	Indian
Languages	English, Hindi, Telugu
Hobbies	Paper Engineering, Sketching in Graphite/Charcoal

EXTRA CURRICULAR ACTIVITIES

- Visualized a microphone's input using processing at Digital Organic, A pool organized by Lucid [<http://goo.gl/tuOt0>], 2012
- Member, Lucid (A studio for speculative art) [lucid.net.in]. Analyzed artistic texts in the areas of New Media and Design, Bangalore, 2012
- Senior Core Member, Creative Activities Club, BITS-Pilani. Majorly contributed to 20" x 20" sketching & painting panels for Oasis 2007, 2008. Exhibited digital works, paintings & sculptures for "Galleria" during Apogee 2007,2008
- Publicity Co-ordinator, Andhra Samithi, BITS-Pilani. Designed and implemented innovative methods of advertising using print media for various cultural programs, 2007.
- Joint Co-ordinator, BITS Physics Society. Designed posters and organized events during APOGEE, 2008.