

TUSHAR DESHMUKH

Master of Technology, Materials Science, IIT Kanpur

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Career Objective:

To work in a creative and challenging environment where I could constantly learn and successfully deliver solutions to problems

Educational Qualifications:

M. Tech. (<i>Materials Science</i>)	→ Indian Institute of Technology Kanpur (2014)	→ 6.82/10
B. E. (<i>Electronics Engineering</i>)	→ Nagpur University (2011)	→ 62.60%
H.S.S.C. (<i>XII</i>)	→ Maharashtra Board (2007)	→ 64.17%
A.I.S.S.C. (<i>X</i>)	→ CBSE (2005)	→ 62.80%

Scholastic Achievements:

- **GATE-2016** qualified with AIR- 2965, Percentile- 98.05, GATE Score- 573
- **GATE-2012** qualified with AIR- 2293, Percentile- 98.60, GATE Score- 579
- **GATE-2011** qualified with 97.7 percentile
- Awarded **Prime Minister's Merit Scholarship** for 2007-11

Extra- curricular Activities:

- **GATE Guide, VNIT Nagpur** **September - December 2014**
 - Guided 25 students from VNIT and private colleges in Nagpur
 - Subjects instructed are EDC, Network Theory, Control Systems
- **GATE Guide, IIT Kanpur** **October - November 2013**
 - Guidance given for subjects are EDC, Communication Systems
- **Senator, Y12 M. Tech. Batch, IIT Kanpur** **August 2012 - May 2013**
 - Batch representative in student's senate, a constitutional body, representing over 100 students
 - Dealing with all academic and non-academic issues related to students such as policy making
- **Assistant Co-ordinator, Inter-IIT tech-meet JUGAAD** **November 2012 - March 2013**
 - Organized inter-IIT Tech meet JUGAAD on platform of Techkriti' 13
 - Students participated from 14 different IITs, marked as an inception of inter IIT tech-meet
- **President, Hall-X, IIT Kanpur** **May - July 2013**
 - Addressed grievances related to hall developments and carried out hall allocations of 650 students

Work Experience:

Manager, Center of Innovation, VNIT Nagpur

July 2014 – July 2015

- In-charge of joint project of Institute-Industry pre-incubation activity based on Li-Ion batteries
- Providing mentorship to business incubates in incubation center
- Responsible for organizing seminars based on entrepreneurship development

Key projects and Thesis:

1. *Multiphysics Simulation of Composites*

(*M. Tech. Thesis*)

- Used nano-composites as well as metal powders as materials under test
- Used software COMSOL Multiphysics to simulate the results using microwave heating physics
- Studied change in dielectric behavior of the materials with respect to temperature
- Nature of electric and magnetic field is also studied
- Designed waveguide in COMSOL to operate on required particular frequencies by varying its dimensions

Thesis Supervisor- Dr. M. J. Akhtar

2. Design of Communication Network through Controller Area Network (B.E. final year project)

- Interfaced CAN network with real time electronic circuit using microcontroller AVR ATmega16
- Reduced time lag in reception of signal from source to destination
- Used Orcad to design PCB containing microcontroller, microchip, CAN network, etc.
- Programmed microcontroller using assembly language programming

Project Guide- Prof. (Mrs.) P. P. Palsodkar

Core Competencies:

Electronics Credentials

- COMSOL Multiphysics 4.3b
 - Used Microwave oven and RF heating module
 - Observed temperature profile after heating at microwave frequency
- MATLAB 2010
 - Worked on digital signal processing by writing different programming codes
- Origin 8.5
 - Used for plotting different curves
- Orcad 16.2
 - Worked on layout and schematic for designing PCB
- Quartus II
 - Manoeuvred for generating signal simulating at hardware level

IT Credentials

- Programming Languages: C, VHDL
- Computer Proficiency: MS office
- Operating System: Windows 8, Windows 7, Windows XP

Co-curricular Activities:

- “Programming Expertise Through C” **June- August 2008**
Kanetkar’s Institute of Computing and Information Technology, Nagpur

Relevant Courses:

Electronics Devices, Network Theory, Control Systems, Communication Systems, Analog Circuits, Digital Circuits, Signals and Systems, Electromagnetics

Personal Details:

Date of Birth : 04 September 1990
Father’s Name : Yashwant Deshmukh
Languages Known : English, Hindi and Marathi
Postal Address : 307/B, Rachana Vihar, Narendra Nagar, Nagpur, Maharashtra-440015

Declaration:

I hereby declare that the information provided above is true to the best of my knowledge.


Tushar Y. Deshmukh