CHETHAN RAMAKRISHNA REDDY (PREFFERED NAME – CHETHAN)

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EDUCATION

- Currently pursuing (2016-Present) **Ph.D. in Mechanical Engineering – Engineering Mechanics (ME-EM)** from Michigan Technological University (MTU), USA. CGPA (so far) – 3.84 on a scale of 4
  Co-advised by Dr. Mahdi Shahbakhti and Dr. Rush D. Robinett III
  Thesis topic – "Exergy-based control of thermal to electrical energy conversion through an Organic Rankine Cycle by model-based engineering
  Part I - Micro-Concentrated-Solar-Power (Building to Grid)
  Part II - Waste Heat Recovery of Diesel IC Engine (Tank to wheels)"
- Highest degree earned (2011-2013) is **Master of Technology (M.Tech.) in Mechatronics Engineering** from National Institute of Technology Karnataka (NITK), India. CGPA – 8.37 on a scale of 10, US CGPA equivalency – 4.00

ACADEMIC PROJECTS

- PhD course projects
  - *Fuel Consumption reduction technologies and hybrid design*
  - *Control-system for a hybrid ECU (MotoTron ECU)*
  - *Effect of external supercharging in a CI diesel engine with swirl combustion chamber*
  - *Efficacy of PV Solar Energy in Houghton, MI*
- Practical Training at Robert Bosch Engineering & Business Solutions Private Limited, India (RBEI).
- Masters' project/thesis – *Development of Automotive Thermoelectric Generator (ATEG)* at RBEI.
- Bachelors' project/thesis – *Design and Fabrication of Boundary Layer Turbine as a Potential Automotive engine (Compressed Air as Fuel)*.

WORK EXPERIENCE

Organization	Duration	Role
Michigan Technological University, Houghton, Michigan, USA	22 May 2017 to Present	Graduate Research Assistant in Energy Mechatronics Lab
	28 August 2017 to Present	Graduate Teaching Assistant for the course Mechanical Engineering Practice IV
Robert Bosch Engineering and Business Solutions Limited (RBEI), Bangalore, Karnataka, India	1 October 2015 to 5 August 2016	Senior Engineer– Modeling and System Simulation
	19 August 2013 to 30 September 2015	Engineer– Modeling and System Simulation
	4 June 2012 to 29 March 2013	Project Intern (Masters' thesis)

TECHNICAL SKILLS

1. Modeling/Simulation/Data Analysis in **MATLAB/Simulink** environment
2. Automobile System Modeling & Simulation – **GT-SUITE, AMESim**
3. Energy Systems Modeling & Simulation
4. Model Based Engineering
5. Model Predictive Control
6. Embedded Software Development Cycle – Usage of Automated tool chain, eg. **ETAS, DSPACE, MotoHawk**
7. Model in loop (MiL), Software in loop (SiL) and Hardware in loop (HiL) testing

CERTIFICATION COURSES

1. Completed "Evaluating Writing Training Program" as a Graduate Teaching Assistant" in the Department of Mechanical Engineering-Engineering Mechanics, Michigan Technological University, Houghton, Michigan, USA
2. Completed a practical and hands on course in Automobile Servicing and Maintenance in G.D. Naidu Charities, Coimbatore, Tamil Nadu, India
3. Completed a familiarization course in H.A.L. Aircraft division, Bangalore, Karnataka, India

LANGUAGES KNOWN

English – Business fluent (Read, write & speak) | Indian Languages known – Telugu (mother tongue), Kannada, Hindi | German (Basic Conversation skills) – 1A qualified

PUBLICATION (http://www.ijsr.net/archive/v2i5/IJSRON2013977.pdf)

Chethan R Reddy, Shrikantha S Rao, Vijay Desai, Karthikeyan Ramachadran – "Modeling of an Automotive ThermoElectric Generator (ATEG)." Volume 2 Issue 5 May 2013 in International Journal of Science and Research (IJSR).

INTERNATIONAL EXPERIENCE

Germany for a 2-week business visit to BEG (Bosch Engineering Group) in Feb 2014.

PERSONAL DETAILS

Date of Birth: 14 December 1989 | **Sex:** Male | **Marital Status:** Single
Passport: H5362516 (India) | **US VISA Class:** F1