

CHETHAN RAMAKRISHNA REDDY (PREFERRED 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) – 3.8 on a scale of 4
Co-advised by Dr. Mahdi Shahbakhti and Dr. Rush D. Robinett III
Thesis topic – “Model-predictive control of energy from organic Rankine cycle (ORC), powered by
I – Micro concentrated solar power, for thermal control of buildings
II – Exhaust in an IC Engine, for performance control of vehicles”
- 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*
 - Decentralized model-predictive control for thermal control of buildings*
- 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 (Fall 2017 & Spring 2018)
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

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| <ol style="list-style-type: none">Modeling/Simulation/Data analysis in MATLAB/Simulink environmentAutomobile system modeling & simulation – GT-SUITE, AMESimEnergy systems modeling & simulationModel-based engineering | <ol style="list-style-type: none">Model-predictive controlEmbedded software development cycle – Usage of automated tool chain, eg. ETAS, DSPACE, MotoHawkModel in loop (MiL), software in loop (SiL) and hardware in loop (HiL) testing |
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CERTIFICATION COURSES

- Completed “Evaluating writing training program” as a Graduate Teaching Assistant” in the Department of Mechanical Engineering- Engineering Mechanics, Michigan Technological University, Houghton, Michigan, USA
- Completed a practical and hands on course in automobile servicing and maintenance in G.D. Naidu Charities, Coimbatore, Tamil Nadu, India
- 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
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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