Kiran Mukund

B.Tech, M.Tech – Mechanical Engineering

Educate the next generation to be Humans, not educated illiterates or learned monsters

Work Experience

10/12/2021–Present **Assistant Professor**, *Mechanical Engineering*.
School of Engineering, CUSAT, Ernakulam

16/08/2019–13/10/2020 **Assistant Professor (Guest)**, *Mechanical Engineering*.
Kunjali Marakkar School of Marine Engineering, CUSAT, Ernakulam

01/08/2019–30/01/2021 **Supervisor**, *Technical Department*.
Smart Engineering, Kariyad

13/03/2019–25/07/2019 **Assistant Professor (Ad Hoc)**, *Mechanical Engineering*.
Government Engineering College, Thrissur

01/03/2017–07/12/2018 **Assistant Professor**, *Mechanical Engineering*.
Adi Shankara Institute Of Engineering and Technology, Kalady

18/07/2016–28/02/2017 **Assistant Professor**, *Mechanical Engineering*.
Axis College Of Engineering and Technology, Kodakara

05/09/2013–30/07/2014 **Graduate Mechanical Engineer**.
Apollo Tyres, Thrissur, Kerala

Education

2014–2016 **M.Tech**, *Engineering Design*.
Amrita School of Engineering, Amrita Vishwa Vidyapeetham,Coimbatore

2009–2013 **B.Tech**, *Mechanical Engineering*.
Adi Shankara Institute of Engineering and Technology,Kalady

2007–2009 **Higher Secondary**, *Mathematics, Physics, Chemistry & Biology*.
Vidhyadhiraja Vidhya Bhavan Higher Secondary School, Aluva

2006–2007 **SSLC**.
Alwaye Settlement Higher Secondary School, Aluva

Technical Skills

MATLAB	●●●◐○	ISRO FEAST^{SMT}	●●●●○	Abaqus FEA	●●●○○
ANSYS	●●●◐○	Autodesk AutoCAD	●●●●○	Autodesk Inventor	●●●●○
Solid Works	●●●●○	Maple	●●○○○	Open Modelica	●○○○○
LaTeX	●●●●◐	Microsoft Office	●●●●◐	Adobe Photoshop	●●○○○

Field of Interest

- Solid Mechanics
- CAD Modelling
- Vehicle Dynamics
- Computational Analysis
- Linear & Nonlinear Vibrations
- Automobiles

Publications

Journal Publications

October 2018 **Design, Analysis and Fabrication of Automated Center Stand for Two Wheeler**.
Kiran Mukund, Design, Analysis and Fabrication of Automated Center Stand for Two Wheeler, *GRD Journals- Global Research and Development Journal for Engineering*| Volume 3 | Issue 11 | October 2018, ISSN: 2455-5703
`http://grdjournals.com/uploads/article/GRDJE/V03/I11/0014/GRDJEV03I110014.pdf`

January 2018 **Process Modelling and Validation of LNG Re Liquefaction**.
Majo Davis, Ben Austin B Alapatt, SreekanthSarma P V, Aravind M, Kiran Mukund, Process Modelling and Validation of LNG Re Liquefaction, *GRD Journals- Global Research and Development Journal for Engineering*| Volume 3 | Issue 2 | January 2018, ISSN: 2455 5703
`http://grdjournals.com/uploads/article/GRDJE/V03/I02/0032/GRDJEV03I020032.pdf`

Conference Publications

August 2016 **Dynamics of a Stable-Quazi-Zero-Stiffness Isolator Mechanism using Multi-Harmonic Balance Method**.
K.Mukund, B. Santhosh, Dynamics of a Stable-Quazi-Zero-Stiffness Isolator Mechanism using Multi-Harmonic Balance Method, *International Conference on Systems, Energy & Environment 2016*|278-282| August 2016, Govt: College of Engineering Kannur, Kerala, ISBN: 978-93-85777-87-5
`https://drive.google.com/file/d/0B2wRsTeMQcWEOWhpaXRpM2hEMDg/view?usp=drive_web`

Peer Reviewer

- International Journal of Automotive and Mechanical Engineering

Project Experience

2018 **Multi-terrain vehicle equipped with an ornithopter**, *Co-investigator*, Applied for funding, Kerala State Council for Science, Technology & Environment.
To design and fabricate a high mobility multi-terrain vehicle with an ornithopter of bio-mimic design. The system can find its applications both in military/ civil applications

2018 **Automated Centre Stand for Two Wheelers**.
Designed and analysed different models of centre stands for two wheelers using Ansys software and fabricated the best model

2018 **Pantograph Mechanism**.
Studied and fabricated a working model of Pantograph Mechanism as a micro project

2016 **Dynamics of A Quasi Zero Stiffness Vibration Isolation Mechanism**.
Designed a Stable Quasi Zero stiffness vibration isolation system to obtain low frequency vibration isolation, and investigated the nonlinear and chaotic behavior of the system using computational methods

2013 **Regenerative Solar Water Heater**.
Designed and fabricated a solar water heater which gives hot water both at morning and evening by regenerating the heat using regenerative materials like paraffin wax

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Industrial Training

22/06/2011 - 30/06/2011 **In-Plant Training**, *Cochin Port Trust*, Kochi, Kerala.
Undergone training at Ernakulam Warf & Automobile section of the IC Engines Division, where the maintenance of Ships, Fork Lift Trucks, Mobile cranes & various other automobiles are being carried out

Achievements

2018 **NPTEL Mentor Award**.
Recognized by NPTEL as mentor for the NPTEL online course titled Introduction to Mechanical Vibration. Mentored 15 students on this course and also obtained an Elite certificate

2016 **Best Paper Award**.
K. Mukund, B. Santhosh, Dynamics of a stable-quazi-zero-stiffness Isolator Mechanism using Multi-Harmonic Balance Method, Proceedings of the International Conference on Systems, Energy & Environment ICSEE 2016

Subjects Handled in Academics

- Theory of Vibrations
- Dynamics of Machinery
- Machine Drawing
- Mechanics of Fluids
- Solid Mechanics
- Automobile Engineering
- Computer Aided Design & Analysis
- Basic Mechanical Engineering

Leadership & Coordination

2017–2018 **Faculty Advisor**, *B.Tech Mechanical Engineering*.
2017–21 batch, Adi Shankara Institute Of Engineering and Technology,Kalady

2017 **Workshop Conducted**, *Workshop on Introduction to MATLAB*.
2^{nd} August 2017, Adi Shankara Institute of Engineering and Technology, Kalady

2018 **Workshop Attended**, *Developing Digital Twins: Modelica Environment*, Workshop handled by Dr. Peter Fritzson, Director of the Open Source Modelica Consortium.
3^{rd} & 4^{th} December 2018, Adi Shankara Institute of Engineering and Technology, Kalady

2018 **Faculty Development Program Attended**, *Multi-Domain System Modelling and Simulation using Modelica*.
4^{th} to 6^{th} October 2018, Adi Shankara Institute of Engineering and Technology, Kalady

2016 **Teaching Assistant**, *Nonlinear vibrations and Introduction to MATLAB*.
Four day workshop, 9^{th} – 12^{th} February 2016, Amrita School of Engineering, Coimbatore

Languages

Malayalam ●●●●● English ●●●●○
Hindi ●●●○○ Tamil ●●●○○

Personal Interests

- Carnatic Music
- Poetry
- Badminton
- Violin
- Driving
- Swimming

Mangalath Soubhagya, Thuruthissery, Mekkad P.O, Ernakulam, Kerala
(+91) 9567919458 • *kiranmukund@gmail.com*

Personal Details

20^{th} of March, 1991

Married to Gopika Kiran

Mangalath Soubhagya, Thuruthissery, Mekkad P.O, Kerala- 683589

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(+91) 9567919458

http://www.facebook.com/kiranmukund

https://www.linkedin.com/in/kiranmukund

Reference

Prof. Dr. M R Radhakrishna Panicker, *Head, Department of Mechanical Engineering*, School of Engineering, Cochin University of Science & Technology, Ernakulam.
mrrpanicker@gmail.com

Dr. B Santhosh, *Associate Professor*, Department of Mechanical Engineering, Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Coimbatore.
b_santhosh@cb.amrita.edu

Declaration

I hereby declare that the above mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above mentioned particular.

Date: May 13, 2022

Place: Nedumbassery

Kiran Mukund