Kevin Jose

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 ♠ kevinjose.net

RESEARCH INTERESTS

Computational mechanics, mathematical modeling, applied mathematics, vibrations & wave propagation, musical acoustics, meta-materials

EDUCATION

University of Southampton, Southampton, UK

Marie Sklodowska-Curie Fellow & May 2019 -PhD student Sept 2022 (expected)

${\bf Indian\ Institute\ of\ Technology\ Kanpur},\ {\bf Kanpur},\ {\bf India}$

B.Tech.-M.Tech. Dual Degree, Mechanical Engineering

Jul 2012 with a minor in control systems engineering

Aug 2017

RESEARCH EXPERIENCE

New York University Tandon School of Engineering, Brooklyn, USA School of Engineering Fellow & graduate Researcher Aug 2017 - Oct 2018

Journal Publications

- 4. **Jose K.**, Ferguson N., and Bhaskar A. "Branched flows of flexural waves in non-uniform elastic plates". (*Nature*) Communications Physics (2022). **In press**.
- 3. Bhaskar A., and **Jose K.** "How far does a fold go?" *Extreme Mechanics Letters* 45 (2021): 101261
- Boldini A.*, Jose K.*, Cha Y., and Porfiri M. "Enhancing the deformation range of ionic polymer metal composites through electrostatic actuation." Applied Physics Letters 112.26 (2018): 261903 (*Equal Contribution)
- Jose K., Chatterjee A., and Gupta A. "Acoustics of idakkā: An Indian snare drum with definite pitch." The Journal of the Acoustical Society of America 143.5 (2018): 3184-3194

Under preparation

- 3. **Jose K.**, Ferguson N., and Bhaskar A. "Branched flow of flexural waves in cylindrical tubes". (to be submitted to *Scientific Reports*)
- 2. **Jose K.**, Ferguson N., and Bhaskar A. "Chladni-like patterns in pillared plates". (to be submitted to *Scientific Reports*)
- Jose K., Ferguson N., Ibsen C., and Bhaskar A. "Computationally efficient models for modal vibration of tube-fin banks". (to be submitted to *Journal of Sound and Vibration*)

Conference Proceedings

 Boldini, A., Jose K., Cha Y., and Porfiri M. "Electrostatic actuation in ionic polymer-metal composites." In *Nano-*, *Bio-*, *Info-Tech Sensors and 3D Systems III*, vol. 10969, p. 1096910. International Society for Optics and Photonics, 2019.

Awards, Fellowships & Scholastic Achievements	Marie Sklodowska-Curie Fellowship ITN University of Southampton.	2019
	Best Mechanical Engineering PhD Qualifying Exam Performance NYU Tandon School of Engineering.	2018
	School of Engineering Fellowship NYU Tandon School of Engineering.	2017
	Best Intern Award Whirlpool Global Technology & Engineering Center, Pune.	2015
	IIT-Joint Entrance Exam All India Rank 792 out of ~0.47 million candidates (99.8 percentile).	2012
	KVPY Fellowship Award (Declined) National fellowship for students interested in research careers in sceince. Awarded by the Government of India & Indian Institute of Science, Bangale	2012 ore.
Research Talks	11th European Solid Mechanics Conference, NUI Galway (Upcoming) Chladni-like patterns in pillared plates	2022
	Elasticity Day, University College London Branched flows of flexural waves in elastic plates and cylindrical shells	2022
	18th European Mechanics of Materials Conference, University of Oxford 2022 Analysis and computations for metamaterial with negative apparent coefficient of thermal expansion	
	ISVR Research Seminar, University of Southampton [Link] Acoustics of idakkā: a drum with "perfect pitch"	2022
	EUROMECH Colloquim 626, Keele University, Online Branched flow of flexural waves in random elastic plates	2021
	Elasticity Day, Isaac Newton Institute, University of Cambridge, Online Persistence behaviour of an elastic strip folded on its edge: the role of two Poisson's coupling (with Prof. A. Bhaskar)	2021 vist &
	Applied Math Seminar, University of Southampton, Online Branched flow of flexural waves in random elastic plates	2021
	Applied Math Seminar, University of Southampton Persistence of folding in an elastic strip	2021
	Dynamics Group Seminar (ISVR), University of Southampton, Online Continuum model and effective medium approaches to dynamics of tube	2020 & fin

 ${\it assemblies}$

Professional Reviewer

SERVICE for The European Physical Journal Plus (Springer). IF $(2020) \sim 3.91$. Aug 2021

Organizer

of the InDEStruct Workshop. ~70 attendees. Sept 2021

INDUSTRIAL Boston Consultancy Group, Gurgaon, India

EXPERIENCE External Consultant (Associate) Nov 2018 - May 2019

Vestas aircoil A/S, Lem, DK

Visiting PhD student Jan 2020 - Sept 2021

Dinex A/S, Middelfart, DK

Visiting PhD student Oct 2020 - Nov 2020

Summer Sigapore University of Technology and Design, Upper Changi, Singapore Internships Visiting Student May 2016 - July 2016

Whirlpool Global Technology & Engineering Center, Pune, India

Summer Intern May 2015 - July 2015

Teaching & Teaching Assistant

ACTIVITY

MENTORING

NYU Tandon: Mechanics of Materials Laboratory (Fall 2017 & Spring 2018)

IIT Kanpur: Mechanics of Solids (Spring 2017); Complex Analysis (Fall 2016)

Mentoring

 $NYU\ Tandon$: Mentored 2 undergraduate student and 1 masters student in their summer projects

 $IIT\,Kanpur\colon \text{Delivered lectures and workshops with more than 300 attendees/participants}$

on hobbyist electronics. Mentored 8 undergraduate summer projects.

Outreach Southampton Science and Engineering Festival May 2022

Macneil Park Family Earth Fair

Sci-Ed Innovators STEM Expo

NYU Tandon School of Engineering Research Expo

Clara Burton High School, Brooklyn

June 2018

April 2018

April 2018

December 2017

References Prof. Atul Bhaskar, (a.bhaskar@sheffield.ac.uk)

University of Sheffield, UK University of Southampton, UK

Prof. Anurag Gupta, (ag@iitk.ac.in)

Indian Institute of Technology Kanpur, India

Dr. Neil Ferguson, (nsf@isvr.soton.ac.uk)

University of Southampton, UK