

Education

- 2019-2023 **Doctor of Philosophy**, *Engineering & Environment*, University of Southampton
Analytical and numerical investigations of wave propagation in random elastic structures and modal vibrations of periodic media.
- 2012-2017 **Master of Technology**, *Mechanical Engineering*, Indian Institute of Technology Kanpur
Experimental and numerical investigation of the acoustics of a drum involving string membrane contact.
- 2012-2017 **Bachelor of Technology**, *Mechanical Engineering*, Indian Institute of Technology Kanpur
Minor: Control Systems Engineering.
Coordinator of the Electronics Club

Work Experience

- 2023- **University of Cambridge**, *Cambridge*, UK
Research Assistant
- 2019-2022 **University of Southampton**, *Southampton*, UK
Marie Skłodowska-Curie Fellow
- 2018-2019 **Boston Consulting Group**, *Gurgaon*, India
External Consultant (Associate)
- 2017-2018 **New York University Tandon School of Engineering**, *Brooklyn*, USA
School of Engineering Fellow

Refereed Journal Publications

- 2022 **Jose, K.**, Ferguson N., and Bhaskar A. “Branching flows of flexural waves in non-uniform elastic plates” *Communications Physics* 5: 152.
- 2021 Bhaskar A., and **Jose K.** “How far does a fold go?” *Extreme Mechanics Letters* 45: 101261.
- 2018 **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: 3184-3194.
- 2018 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: 261903 (*Co-first authors).

Preprint

- 2022 **Jose, K.**, Ferguson N., and Bhaskar A. “Branched flows of flexural elastic waves in non-uniform cylindrical shells” [arXiv:2211.02181](https://arxiv.org/abs/2211.02181) [physics.class-ph] (*under revision at PLoS ONE*).

Conference Proceedings

- 2019 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.

Awards, Fellowships & Scholastic Achievements

- 2019 **Marie Skłodowska-Curie Fellow ITN**, *University of Southampton*
- 2018 **Best PhD Qualifying Exam Performance**, *NYU Tandon School of Engineering*
- 2015 **Best Intern Award**, *Whirlpool Global Technology & Engineering Center, Pune*
- 2012 **IIT-Joint Entrance Exam All India Rank 792**
out of ~0.47 million candidates (99.8 percentile).
- 2012 **KVPY Fellowship**, *Government of India & Indian Institute of Science, Bangalore*
National fellowship for students interested in research careers. (Declined)

Research Talks (Selected)

- 2022 **11th European Solid Mechanics Conference**, *NUI Galway*
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*
Analysis and computations for metamaterial with negative apparent coefficient of thermal expansion
- 2022 **ISVR Research Seminar**, *University of Southampton*
Acoustics of idakkā: a drum with “perfect pitch”
- 2021 **EUROMECH Colloquium 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 twist & Poisson’s coupling (*with Prof. A. Bhaskar*)

Secondments & Internships

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| 2020-2021 | Vestas aircoil A/S , Lem, DK | <i>Visiting PhD student</i> |
| Oct-Nov ‘21 | Dinex A/S , Middelfart, DK | <i>Visiting PhD student</i> |
| May-Jul ‘16 | Singapore University of Technology & Design , Upper Changi, Singapore | <i>Visiting student</i> |
| May-Jul ‘15 | Whirlpool Global Technology & Engineering Center , Pune, India | <i>Summer intern</i> |

Professional Service

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| Aug ‘20 | Reviewer for The European Physical Journal Plus (Springer) | <i>IF (2020) ~ 3.91</i> |
| Sep ‘21 | Organizer of the InDEStruct Workshop | <i>~70 attendees.</i> |

References

Available on request