NIHAL SAJI

Date of birth: 04/09/1997

Nationality: Indian

Gender: Male

CONTACT

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https://nihal-saji.github.io/Nihal_online_resume/

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

ABOUT ME

Hello! I am Nihal Saji: A simulation engineer with a mechanical engineering background. In addition, I'm a highly organized and hard-working individual who is regularly looking for an opportunity to gain more skills and experience, while making a significant contribution to the growth of our society

LANGUAGE SKILLS

MOTHER TONGUE(S): Malayalam

OTHER LANGUAGE(S): English | Hindi | Tamil

TECHNICAL SKILLS

Structural Simulation and Testing

- Structural simulation in Ansys Workbench, Altair Hyperworks, MSC Adams, and Ncode Desgnlife
- Modal Hammer Test Execution and result post processsing

3D Modelling

- CAD modelling in Solidworks, Creo

Mathematical Modelling

- Modelling in Matlab & Simulink

Mechanical Fabrication

- Experience in handling power tools for various mechanical operations

Computer Programming

- Writing Scripts in computer languages such as Python, HTML, C++

Electronics & Control

- Developing Mechatronic systems with the help of Arduino board and sensors

EDUCATION AND TRAINING

2016 – 2020 – India

Bachelor of Technology: Mechanical Engineering

National Institute of Technology Calicut

Address India | **Website** http://www.nitc.ac.in/

2014 – 2015 – India

Higher Secondary: Grade 12 CBSE Science Stream

Jawahar Navodaya Vidyalaya Palakkad

Address India | **Website** https://navodaya.gov.in/nvs/nvs-school/PALAKKAD/en/about_us/About-JNV/

PROJECTS

Mechanical Design Calculator

https://play.google.com/store/apps/details?id=io.kodular.nihalsaji5.App_try_ad1&hl=en_CA&gl=US

An android application for solving mechanical engineering design problems

Multifunctional Crutches

A pneumatic controlled underarm crutches with an innovative design

A Robotic Manipulator with an AR Interface

A 5 DoF serial robotic manipulator which could be controlled using an augmented reality interface

PUBLICATIONS

Finite element analysis of strength of different non-permanent joints subjected to eccentric loading

2020 https://doi.org/10.1063/5.0024910
AIP Conference Proceedings

WORK EXPERIENCE

2020 – CURRENT – India

FEA Engineer

Trane Technologies

- Static and dynamic structural simulation works on new products development and value-addition projects
- Understanding test lab data and improving the model fidelity
- Developing Python scripts for automating FEA result post-processing
- Working on research activities such as digital twin, non-vapor compression cooling techniques

15/06/2019 – 20/06/2019 – India

In plant Trainee

BPCL Kochi Refinery

Experienced the basic working of the petroleum refining industry & Interacted with the workers of the maintenance section of the refinery

2018 – 2019 – India

Mechanical Coordinator

Robotics Interest Group NITC

Coordinated the maintenance and purchase of mechanical equipment of the group, provided mechanical guidance to various research activities in the group, and organized various technical workshops and exhibitions.

RECOMMENDATIONS

Dr Deshpande Vadiraja

Engineering Manager-Advanced Engineering

Dr.Vadiraja Deshpande is currently managing the FEA team as a part of the Modelling & Simulation team for Trane Technologies, a global HVAC leader. He has multiple years of industrial experience in the field of modeling and simulation along with multiple contributions to the academic research field

Email Vadiraja.Deshpande@tranetechnologies.com

Dr. Sudheer. A. P

Associate Professor

Dr. Sudheer. A. P is currently an Associate Professor, Mechanical Engineering, at the National Institute of Technology Calicut. He is in teaching, research, and academic administration for the last 23 years. He has multiple publications in International and national journals and conferences. His research interests are kinematics, dynamics, and control of robotics, mobile robotics, and vision systems. He is a member of "The Robotics Society-India"(TRS-India) and ISTE. Presently he is the editor of TRS-India. He is a reviewer of various technical journals. He is a member of the board of studies in various engineering Institutions/universities

Email apsudheer@nitc.ac.in