



# Rashmiranjan Mohapatra

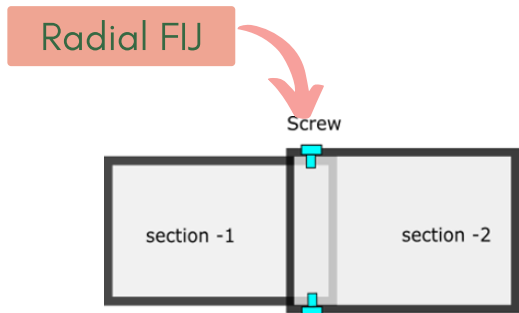
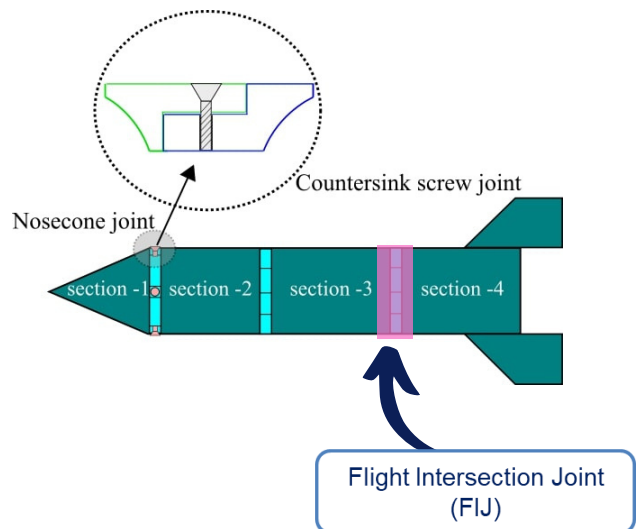
**ABOUT:** I am a MHRD-DRDO-Ph.D. student at Indian Institute of Technology, Hyderabad; working with Dr. Ramji Manoharan and Dr. Vijayabaskar N (DRDO).

**EDUCATIONAL DETAILS :**

- Ph.D. in Mechanics and Design, Department of Mechanical and Aerospace Engineering, IIT Hyderabad, Telangana. (2020-Present)
- M. Tech in Design and dynamics, Department of Mechanical Engineering, College of Engineering Technology, Bhubaneswar, Odisha. (2018-2020)
- B.Tech in Mechanical Engineering, C. V. Raman College of Engineering, Bhubaneswar, Odisha. (2013-2017)

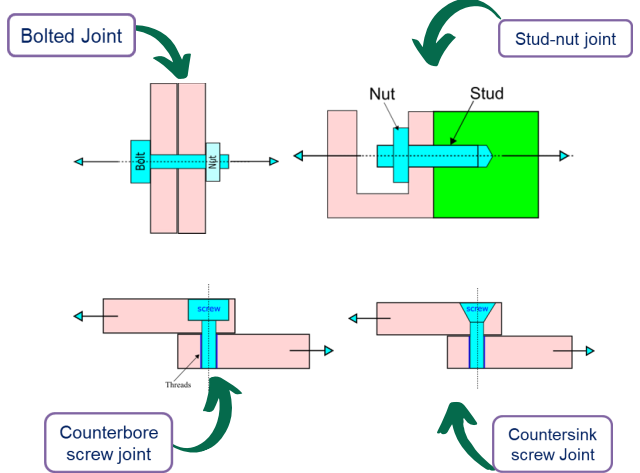
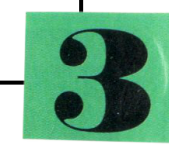
## RESEARCH AREA

Analytical and numerical modelling for joint rotational compliance (JRC) in radial type of flight intersection joints (FIJs).

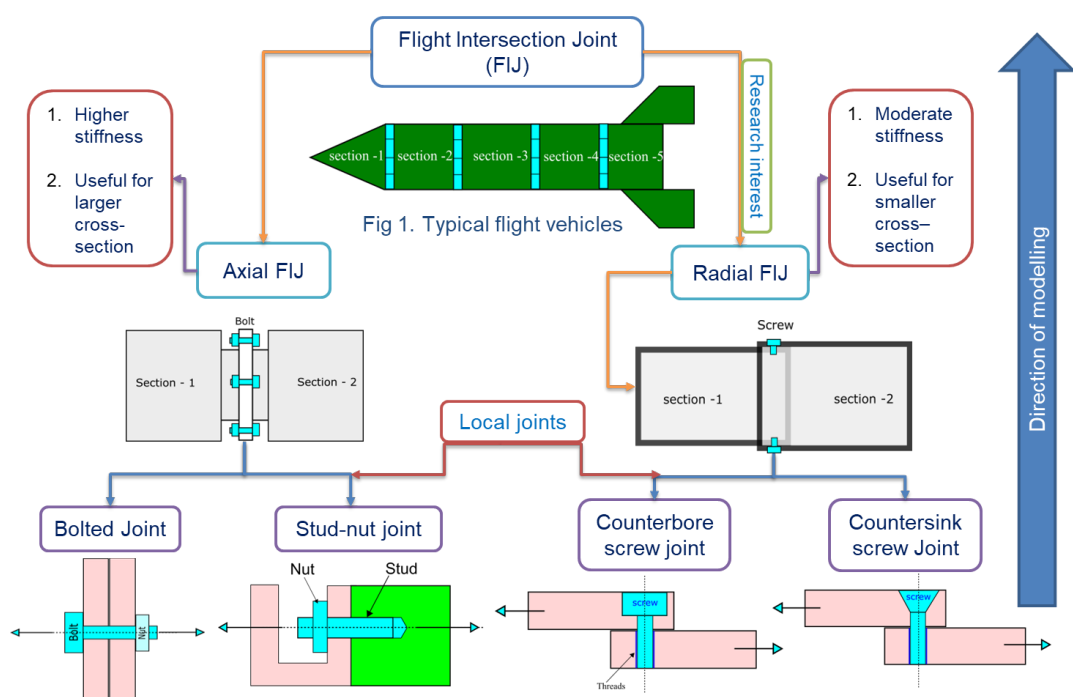


Investigating the effect of pre tightening and geometric parameters on JRC value of radial FIJs

Analytical and numerical modelling of joint stiffness for various type of screw lap joint for metal and composites



## OVER ALL SCOPE



# MODELLING OF LOCAL SCREW LAP JOINT (LOCAL JOINTS)

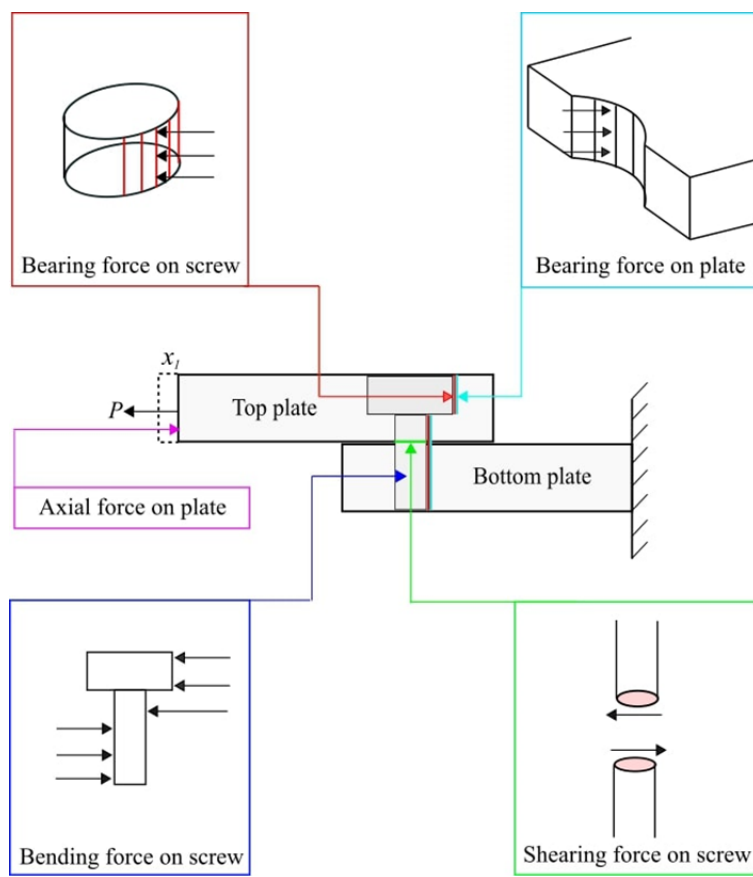


Fig Various forces developed in the joint due to axial load  $P$

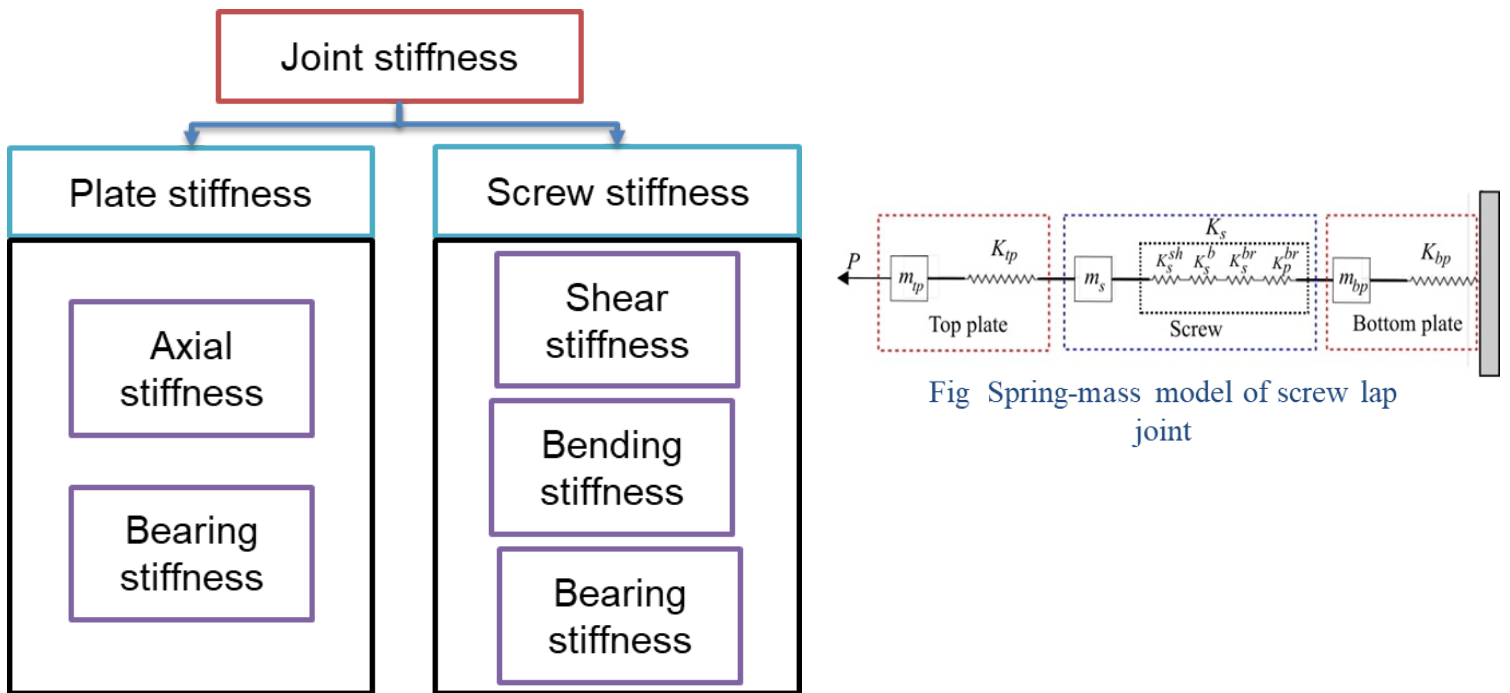


Fig Spring-mass model of screw lap joint

## RESEARCH INTERESTS

- Mechanical joints
- composite structures