Faculty Name:
Vijay Vedula

Faculty Email:
vv2316@columbia.edu

Lab:
Cardiovascular Biomechanics Research Lab

Project Title:
Fluid-structure-interaction (FSI) modeling of heart valves

Description:
We are interested in developing, implementing, and testing novel numerical methods for simulating blood flow interactions with cardiac valves. The student will work with the PI and a postdoc in the lab. The student will gain in-depth knowledge of various numerical methods, including immersed boundary methods, thin shell mechanics, and finite element analysis, and will be exposed to the biomechanics of cardiac valves and patient-specific modeling.

Location of Research:
Hybrid (both Remote and On-Site)

# of hrs/week:
40

Department/Program:
Mechanical Engineering

Eligibility:
MS

To apply, please contact:
vv2316@columbia.edu