



WORK OFFER

Ref. No. IN-2020-32406-MU

Employer Information

Employer: Manipal Institute of Technology
Mechanical & Manufacturing Engineering
1st Floor, Academic Block-4, MIT, Manipal

576104 Manipal
India

Website: <http://www.manipal.edu>

Location of placement: Manipal
Nearest airport: Mangalore
Working hours per week: 40.0
Working hours per day: 8.0

Number of employees: 500
Business or products:

Student Required

General Discipline: 14D-MECHANICAL ENGINEERING
Field of Study: 14.1101-Engineering Mechanics.

Completed years of study: 3
Student status requirements: Required during internship
Language required: English Excellent

Required Knowledge and Experiences:

Good understanding of Finite element Analysis, basic knowledge on modelling and simulation software tools, mechanical design subject.

Other requirements:

Work Offered

Modern radiotherapy techniques allow for planning and delivery of complex dose distributions, which enable an increase in the dose to target volumes and a better sparing of normal tissue. However, anatomical changes in patients limit the benefits of these techniques. It is well known that for radiotherapy of pelvic tumours, the bladder filling is a typical cause of inter fractional and intra-fractional movement. For instance, uncertainty in the location of bladder tumours can be as much as 3 cm because of changes in volume of bladder and adjacent organs, such as the small bowel, sigmoid colon, rectum, uterus, prostate, and seminal vesicles.

Specific geometry and simulate the interaction between the bladder and adjacent pelvic structures. This approach can potentially predict the movement of the bladder and its surrounding organs, based on a single geometric model. i.e. derived from a planning CT_, using just the bladder volume as input. The aim of this project is to introduce this approach and test the accuracy of the model to predict short-term bladder deformation.

Number of weeks offered: 6 - 8

Within the months: 01-MAY-2020 - 15-NOV-2020

Or within: -

Company closed within: -

Working environment: Research and development

Gross pay: 7000 INR / Month

Deduction to be expected: 15%

Payment method / time of first / payment:

Latest possible start date:

Accommodation

Canteen at work: Yes

Expected type of accommodation: Student dormitory

Accommodation will be arranged by: IAESTE India LC Manipal

Estimated cost of lodging: 0 INR / Month

Estimated cost of living incl. lodging: 4500 INR / Month

Additional Information

For more information about the local committee: <http://explore.iaeste.in/mu>

Nomination Information

Deadline for nomination: 15-MAR-2020

Date: 02-FEB-2020

On behalf of receiving country:

Siddharth Chadha