



CALL FOR APPLICATIONS

MSc/MPhil POSITION AVAILABLE

An opportunity to be involved in cutting edge biomedical engineering research at the University of Moratuwa

Title: Surgical Planning Tool for Diabetic Related Amputations

Overview of Project

Currently, more than 10% of the Sri Lankan adult population is affected by diabetes and this is predicted to hit 14% in 2030. As a result a significant number of amputations occur.

Surgery planning is a method of pre-visualising the surgical steps required before the physical cut is made. Surgeons often make surgical decisions based on 2D imaging data. These conventional methods often give limited information. A computational modelling approach will equip surgeons with 3D data allowing them to better prepare for the surgery.

This project aims to equip surgeons with a computational tool which will allow them to make more informed surgical choices before amputations are made. A 3-D computational tool would allow the surgeon to trial various cuts virtually before deciding upon the best plan for the patient.

Supervisory Team:

Dr Pujitha Silva (University of Moratuwa, Faculty of Engineering)

Prof Mandika Wijeratne (University of Colombo, Faculty of Medicine)

Eligibility

The candidate should be enthusiastic and self-motivated with a strong background in mechanical, mechatronics, or biomedical engineering. Prior experience in Finite Element Modelling is **essential**. Prior experience with medical imaging segmentation software such as MIMICS is desired

Stipend: **Rs. 40,000** per month + Teaching Assistant Position

Funding: National Research Council, Research Program on Health Sciences

To apply: Send a copy of the CV to **psilva@uom.lk** or call **0770527954**

