

Faculty of Engineering

Summer Research Program 2023-2024

Project Title: Development of Prosthetic Hand Subsystems

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Objective

A project to build a prosthetic hand for transradial amputees is being undertaken at LMGA. Work has been undertaken on the sensing and hand design/actuation systems. Currently interfaces between these are open with a large body of work available in optimizing and interconnecting these systems. The objective of this project would be to work on the optimization of a system of your choice (Interface, Mechanical design, Integration) and incorporate your findings into the device.

Project Details

The team on this project are working with a participant in a case study of the technology being developed. The participant is a child and therefore the work would be developed for an adult sized prototype. The design process would ideally account for scalability of this design but given the limited timeline and associated costs the focus would be on an adult sized prototype.

Prerequisites

- Experience with prototyping/tinkering both in mechanical and electronic hardware
- Experience with performing experiments preferred
- Programming (MATLAB and preferably some C/C++)

Additional Information

- Applicants may be required to attend an interview.