

Research Assistant(s) / Junior Research Assistant(s) at CUHK BME (Full-time / Part-time)

Principal Investigator: Prof. Raymond Tong Kai Yu from Department of Biomedical Engineering, The Chinese University of Hong Kong.

Project Title/Lab Name:

CUHK Jockey Club HOPE 4 Care Programme – AR (Augmented Reality) Rehabilitation Training System

Online AR Training Platform for the Elderly and Persons with Chronic Diseases at Home

Abstract/Description:

These projects aim to develop and deploy a visual intelligence software product to facilitate physical rehabilitation for stroke survivors and the elderly in local rehabilitation centers. The objectives of this project are:

- (i) to facilitate better upper limb, lower limb and balance recovery on more stroke survivors and the elderly in society with the AR Rehabilitation System design,
- (ii) to undertake algorithm optimization for efficient execution,
- (iii) to develop more functions and improve existing system performance.

Job Requirements:

- (i) **Major in Software Engineering, Computer Science, Information Engineering, Computing, Electrical Engineering or other related disciplines;**
- (ii) Research Assistant: a Bachelor's/Master's degree in the abovementioned discipline, preferably with at least one year's post-qualification experience. Those with less experience may be considered for appointment as Junior Research Assistant; Junior Research Assistant: Fresh graduates of the above-mentioned disciplines.
- (iii) Strong self-motivation, a good sense of responsibility and problem-solving skills;
- (iv) Good communication (basic Cantonese is preferred) and writing skills; and
- (v) Good development and debugging skills in using at least one of the following languages: C, C++, C#, Python and JAVA. Experience in Augmented Reality (AR), data analytics, machine learning are preferred..

Job Duties:

- (a) assist in project as assigned;
- (b) develop visual intelligence software product, which is easy-of-use to customer and bring the best accuracy/performance;
- (c) test, release and improve software based on customer's feedbacks independently;
- (d) deploy and maintain the system in users' homes and rehabilitation centres;
- (e) conduct clinical trials with unimpaired subjects, persons after stroke and persons with disability;

- (f) undertake algorithm optimization for efficient execution; and
- (g) analyze data, write documents, papers and reports.

Applicants may seek more information from Dr. Jessica Yang at jessicayang@cuhk.edu.hk or Professor Raymond Tong at kytong@cuhk.edu.hk. Please **submit your application** by filling in the **google form** <https://forms.gle/39iDkwxJfhK3F3Bs5> **on or before 31 July, 2021**.