

PhD INTAKE

Electrical & Electronic
Engineering

SEND YOUR RESUME



KL WALK-IN INTERVIEW SESSION

Date: 23 Dec 2015 (Wed)

Time: 9:00 - 16:00

Venue: Room 3612, Tower 1, KLCC



Brief Description

The Department of Electrical & Electronic Engineering, and the Centre for Intelligent Signal and Imaging Research (CISIR) strongly welcome those who are interested to pursue PhD in Universiti Teknologi PETRONAS. We are seeking hardworking and committed individuals for the following research topics:

PROJECT 1: Development of a Fully Automated Diabetic Retinopathy Monitoring and Grading system

Our developed Diabetic Retinopathy computerised monitoring and grading system has underwent observational clinical study in 2009 to determine accuracy and to calibrate the severity level used for grading of DR in the system. It is shown that the developed DR grading protocol based on enlargement of Foveal Avascular Zone can be used as an effective DR grading method especially in primary healthcare settings. The system also has the potential in assisting ophthalmologist to make accurate DR diagnosis without using fluorescein angiography. However, the DR monitoring and grading system used during the observational clinical trial was not fully automated. Hence, this proposed study involves the development of a fully automated system for the DR grading and monitoring system. This system will then need to undergo a retrospective study at Selayang Hospital to look for agreement between this system and ophthalmologist approach (gold standard) in grading severity of DR.

PROJECT 2: Early Detection of Dementia based on Brain Imaging

In dementia, pathophysiological changes occur within the brain that ultimately lead to a progressive decline in mental function. Some of these changes can be identified using brain imaging techniques. Multiple imaging techniques exist and are used routinely in the study and treatment of dementia; structural imaging (computed tomography (CT) and magnetic resonance imaging (MRI) and functional imaging (functional MRI, positron emission tomography (PET) and single photon emission computed tomography (SPECT) imaging). Structural imaging is commonly used to investigate the earliest brain regions affected by the disease process, while functional imaging is used to investigate the variety of chemical and other systems that may be involved. This project is to investigate the best combination of structural and functional imaging techniques in developing novel imaging biomarkers for dementia that will involve image registration techniques.

Requirements

Malaysian citizen

Qualification in Electrical & Electronic Engineering/
Computer Engineering / Biomedical Engineering / Physics /
Applied Math and equivalent from a recognized institution.

CGPA Bachelor >3.00, MSc > 3.50 equivalent

Max Age PhD – 35 year

Incentives

Monthly Stipend for PhD student up to RM 4000

Financial support to attend Short Courses and Local
Conferences



KUALA LUMPUR WALK-IN INTERVIEW SESSION

Date : Wednesday, 23rd December 2015

Time : 9.00am - 4:00pm

Venue: Room 3612, Tower 1, KLCC

CONTACT US

Application instructions

If you interested please send your resume to

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