

Call for Graduate Research Assistant

Project Title: Investigation to Increase the Reliability of Skin Detector using Color for Images from Real Time Camera

Project Description: Skin detection is one of the most important techniques in image processing and is the most distinctive and widely used approach for many real time applications, such as face detection and human motion analysis. Skin detection is used to determine the image pixels that are related to human skin. The main objective of the project is to investigate skin detector techniques that can work on images captured in real time. This can be done using the skin color. The expected outcome of the project is developing a new skin detector algorithm based on skin color that can simultaneously overcome problems of illumination, background and camera characteristics. The new skin detector will be based on triplex decision method from the Bayesian Machine Learning (ML) method and the back propagation neural network ML method.

Source of Funding: FUNDAMENTAL RESEARCH GRANT SCHEME (FRGS) (Ministry of Higher Education (MOHE))

Project Duration: 2 years (24 Months) – Starting Immediately

Monthly Allowance: RM 1500

Location: Faculty of Engineering, Multimedia University, Cyberjaya campus.

Benefits of the project (not limited to):

- Attending local conference(s)
- Pursuing Master in Engineering Science (M.Eng.Sc). Tuition fee is waived
- Student with master degree can enroll in MMU Phd program.

Responsibilities:

- Design and experiment on new algorithm for skin detector based on real time camera images. Some algorithms involve the application of concepts in machine learning algorithm.
- Implementation of software prototype using Matlab.
- Research publication

Requirements:

- Bachelor's degree with honors in Electronics Engineering, preferably majoring in **Computer engineering** or Bachelor degree with honors in **Computer Science or Information Technology**
- CGPA of 2nd class and above, Local graduate
- Proficiency in Matlab/C++/Java languages. Excellent command in written and oral English.
- Proactive and able to carry out research independently. Enjoy programming works.

Interested applicants are requested to submit their resumes (with reference) through email to the person below.
All queries regarding the project are welcomed.

Dr Hezerul Abdul Karim (Project Leader)
Faculty of Engineering, Multimedia University (MMU), Cyberjaya, Selangor, Malaysia.
Contact no: 03-83125499
Email: hezerul@mmu.edu.my