

Universiti Teknologi MARA

**Iris Recognition for E-Voting
Authentication in UiTM Melaka
Campus Jasin**

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**Thesis submitted in fulfilment of the requirements
for Bachelor of Computer Sciences (Hons.)
Faculty of Computer and Mathematical Sciences**

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SUPERVISOR'S APPROVAL

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This report was prepared under the supervision of the project supervisor, Madam Nur Nabilah binti Abu Mangshor. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Information Technology (Hons) Information Systems Engineering.

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JULY 24, 2017

STUDENT'S DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

E-Voting system is used in UiTM Melaka to ease and save the time for voting process among students. However, UiTM Melaka still using the conventional authentication process for e-voting system. This authentication process is insufficient due to the paper checklist can easily damage and difficult to monitor student attendance during voting process. Other than that, student have to queue in order to check their details in paper checklist. This situation will consume more time for authorizing the student. Therefore, iris recognition system are proposed to improve the authentication process in UiTM Melaka Campus Jasin because of iris uniqueness and stability. The purposed improves the process of identifying the student and confidentiality issues. The Hough transform has been used to segment the circular iris and pupil region. The unique pattern of the iris will be extract using Gabor filter. Lastly, the matching phase will use the Hamming distance for classification of iris templates. The system performed the recognition on a set of 30 eye images from student of semester 6 in program Computer Science (CS230). As the result of average overall performance of the prototype, 70.37% success rate for iris recognition.