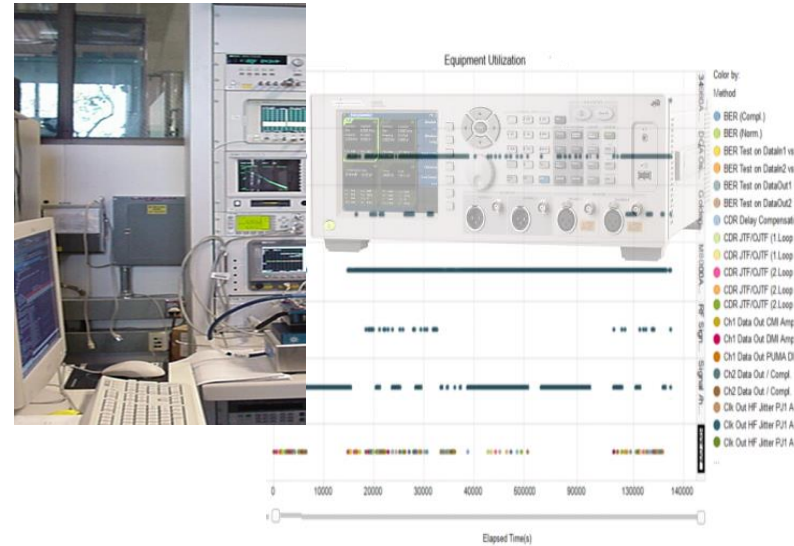


R&D Lecture Series

Reveal & Discover Lecture Series is a program created with the aim to disseminate the knowledge gained by the researchers in CREST funded R&D projects to industries and academia community in the E&E ecosystem. This highly interactive program is conducted by the researchers in the form of workshops and seminars and covers in-depth technical findings from the research projects. Participants will be guided through the methodology of the project with opportunities for hands-on demonstration on the equipment and software. The session provides platform to discuss on the potential application of the research findings and further advancement of research in the field to benefit other industry and academic partners in the E&E ecosystem.



Optimizing Test Time in Instrument Manufacturing Using Bee Algorithm and Data Science



04 May 2016 | 2pm-5pm
CREST Place



**sains@usm, Block A, First Floor, No. 10 Persiaran Bukit Jambul,
11900 Bayan Lepas, Pulau Pinang, Malaysia**

Speakers:



Prof. Dr. Ahamad Tajudin Khader
Dean of School of Computer Sciences
Universiti Sains Malaysia

Mr. Thai Chuan Chee
Software Architect
Software & Test Engineering
Keysight Technologies Malaysia



Dr. Wong Li Pei
Senior Lecturer
School of Computer Sciences
Universiti Sains Malaysia

Who Should Attend ?

Industry and academic community who has interest in the advancement of E&E manufacturing process.

Abstract:

The testing process in the Test & Measurement (T&M) instruments manufacturing is time consuming, capital intensive and generates abundance of data. This lecture introduces a two-stage approach to ensure efficient utilization of the test machines and to increase the test throughput. The approach aims to optimize test time using a bee algorithm and data science techniques. The participants will be introduced to Evolutionary Algorithm, Swarm Intelligence and related methods. The first stage of the proposed approach is to computationally realize the bee foraging behaviours as an algorithmic tool to address a test scheduling problem. In stage two, the T&M data structures were analyzed using data science approaches. The result uncovers key relationships between test parameters, new technique to visualize test failure and common patterns of test bottleneck. This approach enables accurate and fast diagnosis in T&M engineering which was not available before.

Registration closes on **27th April 2016**.

Seats are limited to 40 only! Click [HERE](#) to register now.