Teaching Portfolio

Pritheega d/o Magalingam

Ph.D. (Mathematical Sciences)
M.Sc. (Information Security)
B.Sc. (Computer)

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ACADEMIC QUALIFICATION

Year 2015 : Ph.D. (Mathematical Sciences)
Major: Information Security
Universiti: Royal Melbourne Institute of Technology University (RMIT University), Melbourne, Australia.
Duration: 27th February 2012-16th July 2015

Year 2008 : Master in Computer Science (Information Security)
Universiti: Centre for Advanced Software Engineering (CASE)
University Technology Malaysia, *International Campus*, Kuala Lumpur
Grade: First Class Honours
Duration : July 2007 – November 2008

Year 2005 : Bachelor of Science(Computer)
Major:Software Engineering
Universiti: Faculty of Computer Science and Information System, University Techology, Malaysia, Skudai
Grade: Second Class Honours (Upper Division)
Duration: June 2001- November 2005

TEACHING GOALS

Encourages and values high expectations of students' learning.

I encourage lecturer-student contact in and out of classes. I give motivation and improve students' involvement in learning. I believe that my concern helps students to get through rough times and keep on working. Some strategies that I use are:

- Share past experience, values and attitudes.
- Design projects that bring students to my office and discuss in groups.
- Treat students as human beings: ask how they are doing.
- Use email and WhatsApp regularly to encourage them to finish their work and inform them.
- Create a forum and ask students to give constructive feedback on each other's work and to explain ideas
- Encourage teamwork and leadership among students
- User group discussion, collaborative projects, case study analysis and group presentations to improve students' communication skill and braveness to present in public.
- Use technology to encourage active learning; students can have forum discussions from anywhere outside the classroom.
- Use e-learning to improve the model of asking questions, accepting and giving feedback to their friends' comments.
- Encourage punctuality through online assignment submission.

PERSONAL PHILOSOPHY

Clearly indicate my own Personal philosophy towards student learning with strategies for continuous improvement.

I believe that teaching is not just about delivering the course contents but also to promote meaningful learning and lifelong learning to the students. My role as a lecturer is to monitor how students are adapting well in the class by asking them questions about a specific topic being taught in class and to help them repair misunderstandings. Speaking and writing clearly and concisely is essential. I often use diagrams and demonstrations to explain and let them go through with me some exercises to ensure they fully understand the topics being taught.

I always help students to apply critical analysis while doing assignments and projects and be the driving force behind new, appropriate technology. I encourage students to do research on the topic that they are comfortable with but related to my subject. This way students will be able to explore where to apply what they have learnt in class. Based on their interest they find problems related to the area of research and suggest applying metrics and measures taught in class to find solutions. This way, students are not controlled or dominated to choose a particular area of the lecturer's interest but I give them the freedom to choose. I let them do mini-presentation so that they don't run outtopicsopic. I find that students are more engaged when we are performing problem-solving than when they are simply listening to a lecture. There is a certain joy experienced by solving a challenging problem. This interactive approach to teaching allows students to feel that reward.

Through this philosophy, I teach in the awareness that the students need the opportunity to develop themselves rather than being spoon-fed by the lecturer. The rapport between student and lecturer should be encouraged and improved constantly. With good rapport, the students can have a more comfortable discussion inside or outside of class. On top of that, I feel very strongly that to be an effective lecturer, I need to treat individual students with respect. I must attempt to get to know each student by name, and his or her strengths and weaknesses. I must try to accommodate questions at any time, not just during class and office hours. My job is not only to show them what I know, but to teach them what they need to know, and more importantly to facilitate their learning.

Finally, I hope to be able to instil in students a love of learning. I hope to teach my students that learning is more than just exams and grades. I hope that the real value in their education is not found in their grade point average or their resume, but in the knowledge that they take away.

PRACTICES OF ASSESSMENT

Constructively align assessment methods, that include both formative and summative assessment, with the intended learning outcomes and the T&L activities.

I make sure that the assessment is aligned with the intended learning outcomes. The students are continuously assessed throughout the semester.

Mid Term Paper/ Mid Term Test
The test is usually given towards the end of the semester. To ensure the questions have a different level of difficulties, I focus on level 1 to 5 of Bloom's taxonomy for the test. The test is a comprehensive evaluation of course which covers all material (basic knowledge) from week 1 to week 14. The test takes 30% of the total course marks. There is no final exam for this subject.

Assignments and Project
The assignments are divided into two categories; individual and group. The first and second assignment is an individual assignment. The assignments are usually involving the use of computer software. I want to make sure all the students know how to use the software and assignments are given separately for each individual. The students will be given about 2 to 3 weeks to complete their assignments. Each assignment is given one after another and not together. This is to avoid students to feel brain drain or tired. Evaluating students on each software that has been taught in class is important to estimate the level of understanding and usage of the software. This is also another way to evaluate students' readiness to contribute their knowledge in the group project. The following assessment is through a a group project. Students are given time to explore their own scenario based on a research study and propose solutions. A class presentation will be held for their group project. The students will be given about 4 weeks to complete their project.

Class Active Learning (Forums), Workshop (Hands-on)
During the class lecture session, 2-3 class activities are conducted through elearning to evaluate students' knowledge on the application of metrics and measures taught in class on the real-world case study. Also, it is conducted as a preparation for the class project. Workshops are being held based on the number of software being taught in the class. Based on the class activity, workshops and the overall performance of the students in the class, I will give marks for observation and self-reflection.

EFFORTS TO IMPROVE TEACHING

Clearly provides self-reflection of teaching development and relates it to CQI of teaching strategies.

I constantly ask questions to myself to improve my teaching strategy and performance over time and follows some of these methods to improve my teaching:

After each lesson, I jot down a few notes describing the reaction and feelings of students towards my lecture and activities given. There are some questions I ask myself:

- Was the lesson too easy or too difficult for the students?
- Did the students understand what was being taught?
- What problems arose?

Apart from that, I do give importance to students' feedback. End of every class, I will verbally ask students how they feel about the lesson and teaching. I will ask students to fill up the lecturers' online evaluation form (e-PPP) and also send their feedback through email.

Ongoing teaching improvements are made by getting these questions answered:

- Were students on task?
- With what parts of the lesson did the students seem most engaged?
- With what parts of the lesson did students seem least engaged with?
- How effective was the overall lesson?
- How can I do it better next time?
- Did I meet all of my objectives?
- How did I deal with any problems that came up during instruction?
- Was I perceptive and sensitive to each of my students' needs?
- How was my overall attitude and delivery throughout the class?

These questions are important and I analyse it during and end of each lesson. I will make appropriate changes wherever needed.

Besides that, I will do more research and reading journals that help to update with current issues on new technologies, teaching and learning. Thus, generates new ideas during classes.

TEACHING EXPERIENCES/ RESPONSIBILITIES

POSTGRADUATE TAUGHT COURSE TEACHING (2010-2022)

MSc In Computer Science (Information Security)
MCS 1493 : Law, Investigation and Ethics

Master of Science (Information Assurance)
MANA 1563 : E-crime Investigation and Incident Response Management
MANA 1533 : Enterprise Information Assurance
MANA 2133 : Business Continuity Management

Master of Science (Business Intelligence and Analytics)
MANB2163 : Social Network Analytics

Doctor of Software Engineering
EANE 2113 : Software Engineering Research Paradigm

POSTGRADUATE SUPERVISION

PhD:
Main-Supervisor

Graduated

- **Inthrani Shamugam**: Information Security Risk Assesment Framework for Data Centers in Malaysian Public Sector.

Present

- **Chai Ling**: High Risk Customer Profiling in Banking Industry with Big Data Analytics
- **Khaled Gubran**: Identifying Suspicious Behaviour in Bitcoin Network using Unsupervised Approach.
- **Surenthiran Krishnan**: A Framework for Heart Disease Predictive Analytics
- **Owolewa Rasheed Olabisi:** Adaptive Identity Access Management (AIAM) Model For Public Cloud Computing In Banking Environment.
- **Omar Saif Musabbeh Bin Hamed Almazrouei**: Network Graph Analysis for IoT Penetration Testing

Masters:
Main Supervisor

- **(2020-2021) Nur Nesa Nashuha Binti Ismail:** Classification of Patient's Speech in Malay Language using Supervised Machine Learning

- **(2020-2021) Muhammad Fadhli Bin Mohd Radzi:** A New Malicious Cyber Threat Severity Evaluation Criteria Framework For Ict Departments In Klang Valley, Malaysia

- **(2020-2021) Shivapriya a/p Narayanan:** Enhanced Mobile Payment Fraud Detection Using Hybrid Machine Learning Model

- **(2019-2021) Osamah Ehsan Adduljalil Al- Aghbari:** An Improved Demand Forecasting Model for Customers' Demand Based on Mining Techniques

- **(2019-2020) Daeng Ahmad Zuhri bin Zuhud:** Mining Malaysia's Largest Stock Market Captalisation Performance using Temporal Network Analysis.

- **(2019-2020) Mohamad Hafizudin Bin Idris:** Predicting Medical Insurance Claim Payment Fraud In Medicare System By Using Machine Learning Model

- **(2019-2020) Muhammad Nor Hafiz Bin Yaacob:** Predicting the Urban Rail Passengers Travel Pattern in Klang Valley using an Enhanced Gradient Boosting Model.

- **(2018-2019) Jeyraj a/l S. Maran:** Predicting The Success Rate of Telemarketing Using Machine Learning Technique for Banking Sector

- **(2018-2019) Yalini Bavan**: Predicting Unsafe Food From Amazon User Reviews Using Machine Learning.

- **(2018-2019) Komathi Krishnan:** An Enhanced IoT Security Architecture Layers For The Healthcare Service

- **(2018-2019) Hasif Bin Zulkifli:** Application Of Multi-Layer Perceptron Neural Network Algorithm To Predict The Trend Of Eurusd Market

- **(2018-2019) Chua Kean Hoe**: Digital Crime Evidence Acquisition for Social Media Applications on Windows 10 System

- **(2018-2019) Najmi Azfar Bin Mohd Rosli**: A Practical Approach Of Cyber Threat Hunting Framework For Government Agency

- **(2018-2019) Mohd Hafzi Bin Marzuki**: A Proposed Digital Forensics Framework To Support E-Crime Investigations In Malaysian Armed Forces.

- **(2016- 2017) Sharmiladevi Sonah Kakian@Rajoo**: False Report Identification Algorithm using Text Classification Technique for CitiAct Application.

- **(2016-2017) Fatimah Binti Mohamad Yunus**: Data Quality Evaluation Model for Transportation Agency.

AWARDS AND HONORS RECEIVED

Awards/Achievements:

1) **Awarded for Active Blended Learning Course**

   Year/Sem: Semester 2 2015/2016, Semester 1 2016/2017, Semester 1 2017/2018
   (Subject: Enterprise Information Assurance)

   Year/Sem: Semester 2 2016/2017
   (Subject: Business Continuity Management)

   Year/Sem: Semester 1 2017/2018
   (Subject: ECrime Investigation and Incident Response Mgt, Social Network Analytics)

   Year/Sem: Semester 2 2017/2018
   (Subject: ECrime Investigation and Incident Response Mgt)

   Year/Sem: Semester 1 2018/2019
   (Subject: ECrime Investigation and Incident Response Mgt, Social Network Analytics)

   Year/Sem: Semester 2 2018/2019
   (Subject: Social Network Analytics)

   Year/Sem: Semester 1 2019/2020
   (Subject: Social Network Analytics)

   Year/Sem: Semester 2 2019/2020
   (Subject: ECrime Investigation and Incident Response Mgt)

   Year/Sem: Semester 1 2020/2021
   (Subject: Social Network Analytics)

   Year/Sem: Semester 2 2020/2021
   (Subject: ECrime Investigation and Incident Response Mgt)

2) **Anugerah Perkhidmatan Cemerlang**
   From Advanced Informatics School, UTM KL(2018)

3) **Anugerah Penulis dalam Journal Berindex**
   Faculty Level (2018, 2021)

4) **Train the Trainer**
   HRDF (2017)

SHORT TERM GOALS

My short term goals will be to update my learning modules. I will also want to improve my rapport with my students. I believe a good rapport help to produce good teaching. My aim is to continously increase research activities in the area of teaching and learning.