

PHYSICAL DIGITAL CLASS "ENGINEER SMARTER, NOT HARDER: THE AI SERIES – THE POWER OF LARGE LANGUAGE MODEL (LLM)" PART 3 – INTRODUCTION

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DATE: 7TH DEC 2024 VENUE: IEM MAKER SPACE ROOM, GROUND FLOOR, WISMA IEM, PETALING JAYA, SELANGOR (PHYSICAL) TIME : 11.00AM - 1.00PM SPEAKERS: IR. LEE MUN POH, IR. CHAI CHEN SING, IR. CHEE SHAI CHOON AND IR. YASSER ASRUL AHMAD. CPD HOURS : 2 HOURS CPD REF NUM : IEM24/HQ/469/T

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03-78900133

EACH PARTICIPANTS ARE REQUIRED TO BRING THEIR OWN LAPTOP



# **ORGANISED BY INFORMATION AND** COMMUNICATIONS TECHNOLOGY SPECIAL

SYNOPSIS

This class on Large Language Models (LLMs) is designed to equip participants with cutting-edge knowledge and practical skills in AIdriven natural language processing. The class is structured in three parts and spans over 3 months. Each part builds upon the previous part to thoroughly understand LLMs and their applications.

#### Part 1: Introduction to LLMs (October 2024)

We begin by exploring the foundations of Large Language Models, introducing participants to the various models and vendors shaping the field. Participants will gain insights into the capabilities and limitations of different LLMs, understanding their potential impact on various industries. This section also covers the basics of prompting, teaching participants how to effectively communicate with LLMs to achieve desired outcomes.

### Part 2: Document Generation (November 2024)

Building on the foundation laid in Part 1, this section delves deeper into advanced prompting techniques. Participants will learn to craft precise and effective prompts for a wide range of document generation tasks. Through hands-on exercises, participants will explore how to leverage LLMs for creating reports, technical documentation, summaries, and other text-based outputs tailored to specific needs.

### Part 3: Code Snippets and Engineering Design (December 2024)

The final part of the class focuses on practical applications of LLMs in software development and engineering design. Participants will learn techniques for generating code snippets using LLMs, potentially streamlining their development processes. Additionally, this section explores how LLMs can assist in various aspects of engineering design.

Throughout the class, participants will gain hands-on experience in applying these powerful tools to real-world scenarios. This class is ideal for participants looking to stay at the forefront of AI technology and harness the power of Large Language Models in their professional endeavors.

# ABOUT THE SPEAKERS

### Ir. Lee Mun Poh

Graduated with a bachelor of science (mechanical engineering) from the university of Sussex (UK) in 1975. He is a registered professional engineer with a practising certificate (mechanical), board of engineers, malaysia. Ir. Lee has more than 45 years working experience in the field of industrial automation and controls. He was the past chairman to IEM ICTSIG. He has completed projects in wood, electronic, electrical, chemical and automotive industries.



## Ir. Chai Chen Sing

With 24 years of experience in the engineering industry, Ir. Chai's experience range from consulting services and contracting in construction industry, SCADA implementation for processing plant, web application development and Internet Of Things (IOT). He is currently the principal consultant for Versoset Engineers Sdn. Bhd. and also the technical director for Mercatura, an IOT solution provider. He heads the technical development for integrated custom-made embedded system as well as web application development utilising cloud solution. Ir. Chai Chen Sing graduated from university of new south Wales, Australia in 1992.





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#### Ir. Chee Shai Choon

Ir. Chee Shai Choon is a CPESC certified professional who leads a group of software developers in C & S Software Solutions Sdn. Bhd. which incorporated in year 2006. He is specializing in storm water where he has developed a "core msma suite" which covers all the chapters in msma 2nd edition. He has completed the whole msma2 into digital edition. He is the software developer of the infrastructure software which provided the most comprehensive civil engineering software. He has accumulated 21 in field of IT and years of his experience engineering design. His official website:www.civilstructural.com.my. Currently his company has an international collaboration with three international engineering software companiesfrom Europe i.e. Bricsys (recommended alternative cad) Bricscad BIM, Computer Control System(Bridges)-Greece and Ingeciber, S.A(FEM) Spain. Along with his involvement on IT, he had conducted a number of talks/training in various organizations like IEM, JOS in JPS Ampang, Wawasan Professional TrainingCentre in KL. Talks & seminar.



#### Ir. Yasser Asrul Ahmad

Ir. Dr. Yasser Asrul Ahmad holds a bachelor's degree in electrical engineering from Vanderbilt University USA, MSc from University Kebangsaan Malaysia (UKM) and PhD from International Islamic University Malaysia (IIUM). He is also a registered Professional Engineer with Practising Certificate registered with the Board of Engineers Malaysia(BEM). He startedhis career as a spacecraft engineer at Astronautic Technology (M) Sdn Bhd (ATSB) in 1999 where he was involvedin various international satellite project collaboration such as TiungSAT-1 with Surrey SatelliteTechnology Limited (SSTL) UK, Small Payload Orbit Transfer VehicleProject with AeroAstro, USA, and RazakSATremote sensing satellite program with Satrec-i, South Korea, as well as internal studies on small GEO satellite communications and synthetic aperture radar satellite. He specialized in spacecraft transmitter and receiver, antenna system, electricalground support equipment (EGSE) and ground station for frequencies ranging from VHF to Xband. Later he took up responsibility as a systemengineer and projectmanager involving in satellite system engineering activities, such as satellite Assembly Integration and Test (AIT), launch and ground stationICD development, LEOP and launch campaign. After that, he joined ATM Solution Sdn Bhd a Malaysian technology partner for Agilent Technologies as a Technical Manager overseeing a team of application engineers to provide technical solutions using electronic test & measurement instruments to clientsin the segment of Telecommunication, Education, Aerospace & Defense, and Government & GLC institutions. Subsequently, he pursueda career as an independent engineering consultant specializing on CubeSat development for his clients in Malaysia, Singapore and Indonesia. At the same time, he was appointed by University Selangor (UNISEL) as a Lecturer in Practise to share his working experience through teaching undergraduates at the Faculty of Engineering. He then developed an interest in academic and joined IIUM. He is also actively involved in community services where he is a corporate member of the Institution of Engineers Malaysia (IEM) and hold a position as the Chairman of ICT Special Interest Group (ICTSIG) for three session (2019-2022). In ICTSIG, activities such as talks & technical visitswere organized in the area of IoT, Blockchain, AI, Green Energy,Smart Cities, 5G and programming languages. He also contributes to the country's engineering education development as an Accreditation Panel for Engineering Accreditation Council (EAC) and Engineering Technology Accreditation Council (ETAC)

