

# Course Outline

(A SIDC CPE approved course)

**Title :** Evolution of Algorithmic Trading: From Technical Analysis to Machine Learning

**Date :** 22nd May 2019

**Venue** Moffett Training Centre, E-3-2 , Plaza Kelana Jaya, Jalan SS7/13 A, Kelana Jaya, 47301, Petaling Jaya

**CPE :** 10 Points

**Speaker :** Mr Alex Siew Wee Chai

## Objectives

- 1.Explain the importance of automation in today's trading environment.
- 2.Apply the technology offered by brokers to setup automation system environment.
- 3.Identify key Factor Analysis criteria to filter out good input into a system
- 4.Demonstrate creative qualities in modifying indicators to fit individual needs.
- 5.Identify both qualitative fundamental factors and technical factors combined that will impact on the performance matrix of an automated system.
- 6.Demonstrate the importance of a localized connectivity solution that is different from US environment.
- 7.Distinguish the different options that local brokerage firms have on connectivity vendors, and difference in their configuration needs and setup.
- 8.Recognise the adaptation of algorithm to suit local futures and stock market products' behavioural patterns. 9.Use of hedging techniques in different asset classes

<b>Time</b>	<b>Descriptions</b>
9 : 00 - 10 : 15	The Algorithmic Environment  -Understanding the fundamental factors to design a good algorithmic system-Strategy logic must be sound and unique - Coding environment must be integrated with data vendor, and brokerage firm / clearing house. - API connectivity standards offered by brokers and how to comply -Importance of Understanding global macro in Strategy design.
10 : 15 - 10 : 30	<b>Coffee Break</b>
10 : 30 - 11 : 45	The Technical System Strategy Development  - Basic concept of automation platform - The framework for development of filter criteria- - The platform that supports technical indicator development - Existing technical filters which are popular - Trading time frame - Application of indicators to develop a fully functional trading system
11 : 45 - 13 : 00	Backtesting and System Optimisation  - Basic concept of backtesting - Measurement benchmarks - Optimisation features - How to avoid curve fitting - Time frame choice and personal preference
13 : 00 - 14 : 00	<b>Lunch Break</b>

Time	Descriptions
14 : 00 - 15 : 00	Setting up the Getaway for Automation <ul style="list-style-type: none"> <li>• Procedure to apply custom API and cost of applications.</li> <li>• Initiate brokerage API development</li> <li>• Programming language that suits to the specific brokerage server side API</li> <li>• Start Interactive Brokers environment testing.</li> <li>• IB Gateway as a way to connect Python to brokerage platform</li> <li>• Customize API to suits your trading requirement</li> </ul>
15 : 00 - 16 : 00	Evolution of Investment Models <ul style="list-style-type: none"> <li>•Type# 1 : Arbitrage Models (eg. Linear Regression, Binary Logistic)</li> <li>•Type # 2 : Volatility Models (eg. ARIMA, GARCH)</li> <li>•Type # 3 : Sentimental Models (eg. EDR, News Sentiment, MRN)</li> <li>•Type #4 : Machine Learning Models (eg. KNN, SVM, supervised learning)</li> <li>•Type #5 : Artificial Intelligence Models (eg. LSTM, Alpha Go, unsupervised learning)</li> <li>•Type #6 : Portfolio Models (etc MPT, APT, Black Littermen)</li> </ul>
16 : 00 - 16 : 15	<b>Coffee Break</b>
16 : 15 - 17 : 30	Application of Derivatives Portfolio Hedging Techniques <ul style="list-style-type: none"> <li>- Use of residual spread analysis for systematic hedging</li> <li>- Application of hedging in different asset classes including crypto currencies (eg. BITCOIN and ETHERIUM) and commodities (eg. FCPO)</li> </ul>

# TRAINING COURSE REGISTRATION FORM

COURSE TITLE	Evolution of Algorithmic Trading: From Technical Analysis to Machine Learning
COURSE DATE	22nd May 2019
VENUE	Moffett Training Centre, E-3-2 , Plaza Kelana Jaya, Jalan SS7/13 A, Kelana Jaya, 47301, Petaling Jaya
REGISTRATION	8.30AM - 9.00AM
TIME	9.00AM - 5.30PM
FEES	<b>RM 395 for Banker, member of professional associations [early bird by 22 April 2019]</b> RM 445 for Banker, member of professional associations <b>RM 515 for Public [early bird by 22 April 2019]</b> RM 585 for Public <i>Fees are inclusive of coffee breaks, lunch, program materials and a Certificate of Attendance</i>
SIDC CPE Points	<b>10 (Ten)</b>
Instructions	Complete this form and fax to 03-76104234 or email to cpeseminar@chkconsultancy.com.my
Payment Details	1. Cheque made payable to "MOFFETT CONSULTANCY SDN BHD". 2. Or bank in to MAYBANK A/C #. 557063614330 3. Scan and email bank in slip to cpeseminar@chkconsultancy.com.my or fax to 04-2299327
Terms & Policies	1. submission of this document would imply agreement to our terms and policies. 2. Moffett Consultancy Sdn Bhd only recognizes either payment or Letter of Undertaking and this form to confirm reservation for the participant. 3. Moffett Consultancy Sdn Bhd implements a non-refund policy. Transfer to another program date incurs a 20% transfer fee and must be within 1 month from the effected month. However, we allow a replacement participant with no additional charge. 4. Cancellation made within 7 calendar days before the event date will incur a fee of 50% of the program fee. 5. Payment made any time AFTER the program date will result in an additional collection fee amounting to 15% of the original invoiced amount. 6. Registration is on a first-come-first-served basic. Walk-in participant/s will be admitted on the basic of space availability. 7. DISCLAIMER : Moffett Consultancy Sdn Bhd reserves the right to change the venue, alter the speaker(s) without further notice, reserves the right to cancel/postpone this program. Administrators and participants will be notified and any payment received will be carried forward.

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## PARTICIPANT DETAILS (COMPLETE ALL DETAILS)

FULL NAME	
DESIGNATION	
NEW NRIC/PASSPORT NO.	
EMAIL ADDRESS	
PHONE NO.	
MOBILE	
SC LICENCE / CMSRL NO.	
PROFESSIONAL ASSOCIATIONS MEMBERSHIP NO.	

## ADMINISTRATOR DETAILS

COMPANY	
CONTACT PERSON	
EMAIL ADDRESS	
PHONE NO.	
FAX NO.	
BUSINESS POSTAL ADDRESS	