**Social Media and Big Data Analytics with Case Studies**

6 hours - $3800

This programme aims at enabling participants to apply Social Media Analytics to different areas such as digital marketing, social listening and customer satisfaction. In addition, participants will learn how to apply Big Data Analytics, NLP (Natural Language Processing), Sentiment Analysis and Deep Learning techniques on textual and image data processing.

**Pre-requisite**: Nil

**Emerging Technologies**: Social Media Analytics, Sentiment Analysis, Natural Language Processing and Deep Learning

**Target Audience**:

* Industry practitioners who are interested in applying Social Media Analytics and Sentiments Analysis
* Professionals who would like to sharpen their skills with the latest AI and Machine Learning technologies
* SME/start-up entrepreneurs who wish to get inspiration to incorporate social media into their businesses

**Day 1 (3 hours): Social Media Data Collection, Processing and Visualisation**

* Social Media data collection, pre-processing and visualisation
* Massive dataset organisation such as indexing, keywords searching and ranking for relevance
* Special handling for Chinese and Cantonese languages
* Case studies: Social listening for company/product brandings, KOL and micro influencer identification, Machine Learning algorithm for product cross selling and recommendation

**Day 2 (3 hours): Natural Language and Image Processing**

* Basic building blocks of Natural Language Processing and Word2Vec embedding
* Introduction to deep learning based image processing
* Case studies: chatbot, customer sentiment analysis and image recognitions

**Advanced Python applications in Quant Trading with Machine Learning and Sentiment Analysis**

6 hours - $4800

This programme aims at enabling participants to apply Python into trading and investment. This practical course will apply the latest techniques such as Machine Learning and Sentiment Analysis to build trading strategies and construct investment portfolio.

**Pre-requisite**: Basic Python knowledge

**Emerging Technologies**: Sentiment Analysis, Natural Language Processing and Machine Learning

**Target Audiences**

* Practitioners interested in applying Python in trading and investment.
* Professionals who would like to sharpen their skills with the latest AI and Machine Learning technologies.

**Day 1 (3 hours): Machine Learning and Data driven Quant Trading Strategy**

* Construct Equity Long/Short Pair investment portfolio
* Stock selection and Pairs identification
* Supervised Machine Learning in short-term stock price trends

**Day 2 (3 hours): Unsupervised Learning methods and Social Sentiment Analysis**

* Social media sentiments and stock price correlation
* Understand textual data with Natural Language Processing
* Industry applications: Sentiment long/short in different asset classes. Smart Beta for portfolio construction and re-balance by pair-algorithm