## Lee Heng Wai, Alan

### Research | Data Analytics | Product Development | Business Intelligence

A research-focused data analyst with more than 3 years of experience coding in python, SQL, with full-stack capability (MERN). I primarily use statistical inference to drive insight and add value to existing processes.

#### **CONTACT**

## (+65) 91510925 ahlanlhw@gmail.com LinkedIn || Github

#### PERSONAL/FUN PROJECTS

- Automated news reader (py)
- Crypto News Aggregator
- Automated Crypto Trading Bot (REST API & web sockets) (py)
- Google trends scraper (py)
- Central Bank Speech extract (py)
- Project management webapp (nodeJS)

#### **BUSINESS SKILLS**

- Product Development
- Statistical Inference/Analyses
- Econometrics, Macro Forecasting
- Data Governance
- Geospatial Analytics
- ETL Pipeline (end-to-end)
- Workflow Automation
- AGILE, SCRUM methodology using Jira and Kanban boards
- Project Documentation

#### **TECHNICALS**

- Python (Pandas, numpy)
- SQL, NoSQL RDBs (CRUD)
- NodeJS, JavaScript
- HTML, CSS
- ExpressJS, ReactJS
- Excel, Word, PowerPoint
- PowerBi
- AWS S3 Bucket
- Git VCS (pull, commit, push)
- Bash/Shell Script

## **SPOKEN LANGUAGES**

- English (Fluent/Bilingual)
- Mandarin (Fluent/Bilingual)
- Japanese (Basic)

#### **EDUCATION**

# **University of London International Programmes**

Bachelor of Science, Major in Economics, Upper 2<sup>nd</sup> Honours Aug 2012 – Aug 2015

#### **PROFESSIONAL EXPERIENCE**

#### Crypto.com, Singapore

Research Analyst, Blockchain, DeFi, GameFi || Feb 2022 – Jul 2022

- Covered Layer 1&2 blockchain developments, GameFi and Crypto Market activity in weekly newsletters. Authored monthly articles on Blockchain Energy Consumption and Asset Custody. Contributed thematic macro ideas for the monthly Alpha navigator.
- Projects: Wrote python scripts to streamline workflow within the research team to
  aggregate crypto newsfeed into a centralized document using google docs developer API;
  Helped to improve python code for automated chart generation. Developed end-to-end
  data feed for GameFi newsletter; Twitterbot to track blockchain protocol related updates.

## Wood Mackenzie, VERISK Analytics, Singapore

Data Analyst, **Upstream Oil & Gas** | | Jan 2019 – Jan 2022

- Improved product data quality for East and Southeast Asia upstream O&G data by applying statistical inference across existing products improving over 50,000 datapoints. Used BI dashboards to continuously track product data quality on internal Oracle RDBs. Applied geospatial analytics and geo-referencing techniques to enrich data product offering to clients (ESRI ArcMap, ArcPro). Contributed and documented part of the company's digital transformation initiative towards cloud-based data ingestion and automation via AWS Datalake suite with a focus on ETL methods (Extract-Transform-Load).
- Projects: Designed, developed, and led end-to-end product development working with US Listed company financial datafeed, with the end goal of feeding it into corporate research reports. Developed in-house automation scripts and python GUI to improve workflow within other business units via using scripts to track Chinese upstream news flow and an offshore rig tracking tool blending key data points into actionable data.

#### J.P Morgan Chase & Co

Research Analyst, **Emerging Markets Asia, Economics** | Mar 2018 – Aug 2018

- Responsible for commentaries on latest economic developments for EM Asia countries (Singapore, Malaysia, Indonesia), made available on JPMC's client portal; MAS licensed (CMFAS modules M5, 6A etc).
- Utilised macroeconomic data to complement the firm's economic views (CEIC data, BIS, World Bank, FRED and JPMC's proprietary database); Applied various econometric, time series and detrending techniques such as using the Hodrick-Prescott filter for internal stakeholders.
- Projects: Introduced data visualization methods for economic data via python's matplotlib;
   Replicated research paper results studying the unemployment-inflation relationship in R;
   Initiated the use of supervised and unsupervised machine learning classifier techniques to screen trade ideas for the strategy team.

## Centre for Asset Management Research & Investment, NUS Business School Research Analyst, CAMRI | Sep 2015 – Feb 2018

- Maintained and improved in-house quantitative model covering six Asian countries and US
  using academic literature; applied portfolio constraint optimisation methods via Barra
  Aegis and Bloomberg.
- Organised and evaluated macroeconomic data for NUS-Cornell Global Investors'
   Friendliness Index housed at CAMRI; Produced macroeconomic data visualizations for monthly market research pieces.