

# Chen Jun Ming

jmchen.2018@smu.edu.sg | [linkedin.com/jun-ming-chen](https://www.linkedin.com/jun-ming-chen) | [github.com/junmingg](https://github.com/junmingg)

## Education

### Singapore Management University (SMU)

Aug 2018 – Present

*Bachelor of Economics – Data Science and Analytics Major*

- **Cumulative GPA:** 3.52 / 4.00
- **Relevant coursework:** Financial Analytics, Financial Data Analysis, Time Series Data Analysis, Spatial Data Analysis, Data Science for R, Statistical Inference for Data Science, Big Data Analytics, Computational Thinking, Introduction to Machine Learning, Introduction to Artificial Intelligence, Data Mining and Business Analytics, Business Data Management, Introduction to Econometrics

## Work Experience

### Singapore Tourism Board, Travel Agent Licensing and Regulatory Review

Jun 2020 – Aug 2020

*Data Analytics Intern*

- Implemented data and predictive analytics models in R to be included in their annual report for Travel Agents
- Developed dashboards in Microsoft Excel to help visualize travel agent data
- Designed framework for analytics capabilities and competencies for existing systems

### Advisors Alliance Group, AIA Financial Advisors

May 2019 – Jul 2019

*Intern*

- Generated solutions to common problems such as customer engagement and talent acquisition
- Revamped the social media and web presence using content calendars and rebuilt their website on Wix

### Gain City

Jan 2018 – Jun 2018

*Finance Intern*

- Contributed to multiple roles such as document checking, refunds, cash counting and bank reconciliation
- Create Standard Operating Procedures to streamline document checking process

## Projects

### Estimating and Forecasting Yield Curves for Zero Coupon Bonds

- Calculated forward and spot rates from US Treasury bonds
- Fitted the yield curves using Nelson-Siegel Model and Nelson-Siegel-Svensson Model for yield curves
- Forecasted the yield curves using ARIMA modeling
- Visualized over 8000 yield curves as a 3D surface plot

### Sign-language to speech

- Leveraged on MediaPipe Hands library for hand detection which plots 21 3D landmarks of the hand
- Applied the VGG-16 convolution neural network architecture to train one of the models
- Used Google Text-to-Speech to produce audio for the predicted word

### Policy Aggregator (GovTech CodeFiesta Hackathon 2021 – Best Composition Prize)

- Developed a policy aggregator that produces all the recent policy changes
- Web-scraped Wikipedia for policy changes and compiled it into a database

## Skills

**Data Science:** Python (scikit-learn, NumPy, Pandas, matplotlib, seaborn, tensorflow, keras), R (ggplot2, dplyr, rvest, tidytext, sf, tmap, lubridate, forecast, purr, quantmod, xts), SQL (MySQL)

**Development:** Shiny, HTML, JavaScript, CSS, Vue, PHP, Flask, Java

**Big Data:** Hadoop, Spark

## Certifications

**Data Science:** Python (Hackwagon Data Science 101), R (Gen Infiniti WILEY Data Analyst Course)

**Insurance:** Capital Markets and Financial Advisory Services Modules 5, 8, 9, 9A and Health Insurance

## Co-Curricular Activities

### SMU Judo

Aug 2018 – Present

*Executive Committee – Vice-President (2020), Safety & Operations Director (2019)*

- **Awards received:** 2019 Kyu Grade Advanced Under 66kg Men's Silver, 2018 Kyu Grade Intermediate Under 66kg Men's Silver