Public Markets Investing

[1] Basic Math and Common Sense
[1.1] Internal Rate of Return (IRR) and the notorious Reinvestment Assumption
https://rpubs.com/rafael_nicolas/irr_mirr
[1.2] Accounting for Finance & Investing
https://pages.stern.nyu.edu/~adamodar/New_Home_Page/webcastacctg.htm

[2] R Programming and Domain Knowledge
[2.1] Managing Fixed Income Investments Programmatically
https://rpubs.com/rafael_nicolas/fixed_income_portfolio_mgmt
[2.2] Relative Value Models used in Fixed Income Trading Algorithms
https://rpubs.com/rafael_nicolas/fixed_income_relative_value

[3] Feature Engineering
[3.1] Global Interest Rates Dynamics and Inflation Expectations
https://rpubs.com/rafael_nicolas/global_interest_rates_dynamics_inflation
[3.2] Global Default Spreads & Risk Premiums
https://rpubs.com/rafael_nicolas/crp
[3.3] Tour of World Economies & Businesses
https://rpubs.com/rafael_nicolas/tour_world_economies_businesses
[3.4] R&D Expenses: Revised formulations for Profitability Measurement and Valuation
https://rpubs.com/rafael_nicolas/rd_expenses
[3.5] Capital allocation via optimal financing mix and excess returns
https://www.linkedin.com/pulse/capital-allocation-via-optimal-financing-mix-excess-fermin-cota/

[4] Statistical Learning
[4.1] TextMining Warren Buffett Letters to Shareholders
https://rpubs.com/rafael_nicolas/berkshire_sentiment
[4.2] Beige Book Sentiment Text Analysis with Sentometrics
https://rpubs.com/rafael_nicolas/beige_book
[4.3] With the Tidymodels framework and a lot of feature engineering one could build trading strategies that may outperform the buy and hold strategy:
https://github.com/rnfermincota/academic/tree/main/teaching/NUS/Statistical-Learning/2-Cryptocurrencies
[4.4] GPU Accelerated Machine Learning for Bond Price Prediction
https://github.com/rnfermincota/academic/tree/main/teaching/NVIDIA/GPU-Accelerated-Machine-Learning-Bond-Price%20Prediction

[5] Final Project
[5.1] Shortfalls of the Hierarchical Risk Parity
https://www.linkedin.com/pulse/shortfalls-hierarchical-risk-parity-rafael-nicolas-fermin-cota/
[5.2] Factor Investing Using Deep Learning
https://developer.download.nvidia.com/video/gputechconf/gtc/2019/presentation/s9743-factor-investing-using-deep-learning.pdf
[5.3] Systematic Position Management Framework
https://rpubs.com/rafael_nicolas/systematic_position
[5.4] M6 Competition
https://github.com/rnfermincota/academic/tree/main/teaching/NUS/Statistical-Learning/4-Portfolio-Mgmt

Private Markets Investing

[1] Basic Math and Common Sense
[1.1] Internal Rate of Return (IRR) and the notorious Reinvestment Assumption
https://rpubs.com/rafael_nicolas/irr_mirr
[1.2] Fee effectiveness in real estate and private equity investments
https://rpubs.com/rafael_nicolas/fee_effectiveness
[1.3] The Pragmatics of Private Markets Investing
https://jpm.pm-research.com/content/46/5/79

[2] R Programming and Domain Knowledge
[2.1] Modeling a Bachelor Rental Development Project
https://github.com/rnfermincota/academic/tree/main/teaching/NUS/Data-Engineering/2-Real-Assets/Real-Estate/analysis
[2.2] Tricks to deploy cash flow models, and interactive dashboards to develop a competitive edge in real assets investing.
https://github.com/rnfermincota/academic/tree/main/teaching/NUS/Data-Engineering/2-Real-Assets/Real-Estate/dashboard
[2.3] Vectorizing the water utility's policy simulation model
https://github.com/rnfermincota/academic/tree/main/teaching/NUS/Data-Engineering/2-Real-Assets/Water-Utility

[3] Data Engineering
[3.1] Airbnb Data Analysis for Singapore
https://rpubs.com/rafael_nicolas/airbnb_singapore_data_analysis
[3.2] Tidying Saudi Aramco Valuation
https://rpubs.com/rafael_nicolas/aramco
[3.3] Applying Data and Analytics in Private Markets Investing
https://rpubs.com/rafael_nicolas/nus_pe_ds_course

[4] Statistical Learning
Time series forecasting with panel data and ensemble stacking with model.time
https://github.com/rnfermincota/academic/tree/main/teaching/NUS/Statistical-Learning/3-Forecasting/modeltime

[5] Final Project
[4.1] FFORMA: Feature-based Forecast Model Averaging
https://robjhyndman.com/publications/fforma/
[4.2] Retail sales forecasting M5 competition
https://github.com/rnfermincota/academic/tree/main/teaching/NUS/Statistical-Learning/3-Forecasting