

Adriel Ong

TECHNICAL SKILLS

Programming Languages: Python, R, Julia, C#, SQL, \LaTeX , HTML, CSS
R Packages: dplyr, tidy, tidyCDISC, patientProfilesVis, clinUtils, stargazer, Hmisc
Python Libraries: Statsmodels, PyMC3, sklearn, numpy, PyTorch, PySpark, TensorFlow
Data Visualization: Python (Dash, Anvil, Matplotlib), R (ggplot2)
C# Frameworks: Avalonia UI, Entity Framework
NoSQL Databases: ScyllaDB
Other Software Used: SageMath, Stata, GAMS, OnlyOffice
Clinical Data Standards: SDTM, ADaM
Treatment Outcome Analysis: Dose Escalation, Randomized Control Trials, Registry Study.
Credit Risk Modeling: PD, LGD, and EAD
Spatial Modeling: Kriging, space-time, spatial autocorrelation, STARIMA, IDW, etc
Financial Modeling: Technical Analysis, Portfolio Optimization, Returns Modeling, VaR
Machine Learning: Neural Networks, Gaussian Mixture Modeling, Bayesian Statistics, etc

FORMATION

2022/06	Postgraduate Diploma in MATHEMATICS Open University, United Kingdom
2021/06	Postgraduate Certificate in MATHEMATICS Open University, United Kingdom
2019/12	Bachelor of Science in APPLIED ECONOMICS, Major in INDUSTRIAL ECONOMICS De La Salle University, Philippines Thesis: "Developing a Provincial Destination Choice Model of the Philippines" Advisor: Lawrence B. Dacuycuy cGPA: 3.193/4.0

POSITIONS HELD

2020/03–2023/03	Statistician, Independent Contractor Performed regression analysis, treatment effect analysis, and credit risk modelling, among others
2020/11–2022/02	Academic Council, M&S Research Hub Leadership and Teaching role; taught econometric, statistical, and probability theory Kassel, Germany

COURSES TAUGHT

M&S RESEARCH HUB

Applied Econometrics

A program for training in Econometric Theory.

Progmetrics

A program for training in practical Econometrics using R and Python.

Introductory Machine Learning Theory and Practice

Intensive training on the fundamentals of Machine Learning for econometric modeling and data analysis using Julia.

Bayesian Inference for Data Science and Research

Introductory training for Bayesian inference theory and applications to statistical inference and regression analysis.

Theoretical Foundations of CGE Modelling

Training for Computable General Equilibrium models with GAMS.

Recommended course by the GAMS Institute.

Bayesian SVAR and Regime Switching Models Using R and STATA

Special training for the theory and practice of Structural Vector Autoregressions, Bayesian Inference, and Regime Switching Models with R and Stata.

Biostatistics

Introductory training for survival analysis, clinical trials, and multiphase optimization strategy implementation trials.

SOFTWARE DEVELOPMENT

PYTHON

PanelKalmanFilter

Library for estimating Kalman Filter models for panel data.

PyRPO

Implements robust panel optimization with ellipsoid uncertainty sets.

PyLevyProcess

Simulates a Levy process for asset returns using Hamiltonian Monte Carlo.

PyTorchDistributionsExtended

Implements numerous distributions using PyTorch that are not supported by default.

REFERENCES

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