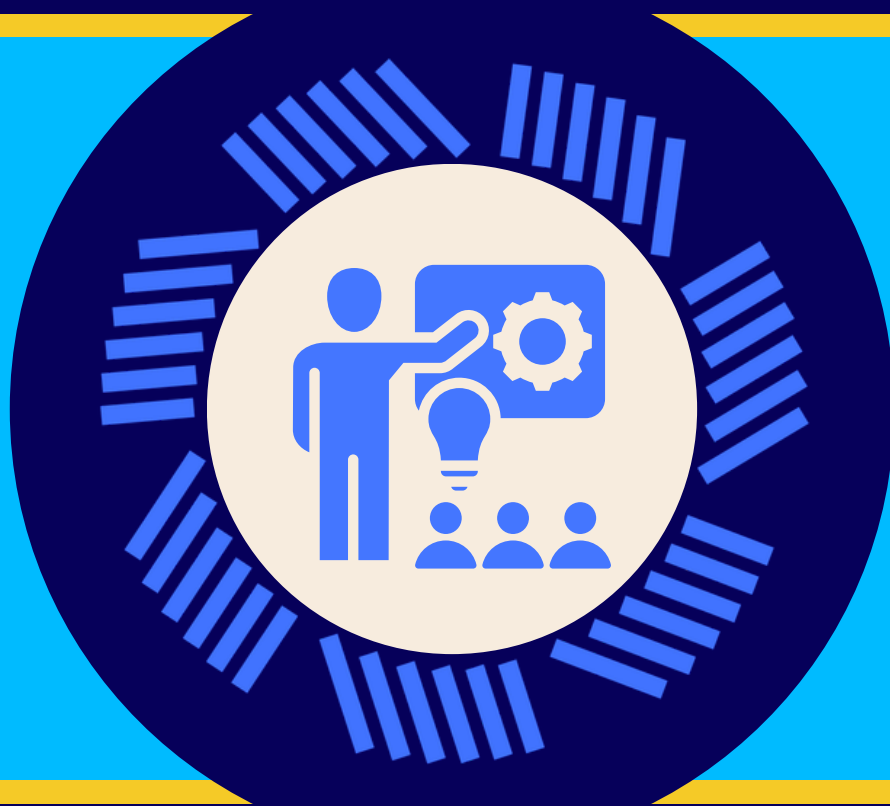




CFA Society
Philippines



PHITOPOLIS



QUANTITATIVE RESEARCH WORKSHOP



Quantitative Research Workshop

24 and 27 July 2026 | 9:00AM - 4:00PM | Venue: Ecotower BGC



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Details

Registration Details (VAT Inclusive)

CFA Members : Php 24,638.88
Faculty/Sponsors : Php 24,638.88

Early Bird Rate : Php 29,118.88 (until May 31, 2026)
Regular Rate : Php 32,478.88

Deadline of Registration : July 17, 2026

Registration Link : <https://bit.ly/QRW2026>

Date : July 24 and 27, 2026

Time : 9:00am - 4:00pm

Venue : Phitopolis Office, 27th Floor, Ecotower, 32nd Street corner 9th Avenue, BGC

Contact Persons

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Precious Canoza-Miranda
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Billing and Payment
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Overview

The objective is to guide participants through the end-to-end process of creating a model to predict daily stock returns using a provided US dataset. Participants will construct long-short portfolios based on model predictions and backtest them to assess performance.

The Quantitative Research Lifecycle

Participants will follow a professional quant research workflow:

- **Raw Data Processing & Feature Engineering:** Creating time-series and cross-sectional transforms.
- **Modeling:** Defining train/predict periods and generating predictions.
- **Portfolio Construction:** Building long-short portfolios from model outputs.
- **Evaluation:** Backtesting performance using metrics like Annual Sharpe, Returns, and Max Drawdown

Target Audience

- Investment professionals
- CFA Charterholders
- CFA Candidates seeking to enhance their systematic research capabilities.



Why Take This Workshop

From Manual Picking to Systematic Scale

The greatest gap in modern investing isn't a lack of data; it's the bottleneck of manual decision-making. Most investors still rely on a subjective "stock-picking" process that limits their scope to a handful of assets. This workshop provides a bridge to a better way: using a systematic, data-driven framework to scale your financial intuition across the entire market. In school, you learn the math; here, you learn the industry. We move past textbook equations to show you how professional quant hedge funds actually operate. Instead of guessing or looking at stocks one-by-one, you'll learn how to build a "research engine" that analyzes thousands of assets simultaneously.

Engineering the "How"

To take advantage of this systematic shift, you need the right infrastructure. We teach you to move beyond basic syntax and focus on high-level investment logic:

- **Cloud-Powered Research:** Learn to use Amazon Web Services (AWS) to tap into high-performance computing, allowing you to process massive datasets that a standard laptop simply can't handle.
- **The Speed of Parallelization:** Speed is an edge. You will implement workflows that train models and run backtests in parallel, doing hours of work in minutes.
- **The Math of Survival:** Master the "friction" that breaks amateur models. You'll learn to engineer stationary features and account for real-world costs like slippage, rotation, and volatility shifts.

Future-Proof Your Career

This class is about more than just writing code—it's about building the confidence to back up your big ideas with hard data. Whether you want to save time by automating your workflow or you're a student looking to stand out in a competitive job market, we've got you. You'll walk away with a professional Python toolkit and a portfolio of work that proves you can build smart, reliable strategies that survive—even when the market gets messy.



DAY 1

AM Session Python Basics (Jupyter Notebook)

- Introduction to Quantitative Research Workflow
- Introduction to Jupyter Notebook: Navigating cells (Markdown vs. Code), kernel management, and keyboard shortcuts for efficiency.
- Variable Types & Data Structures: Understanding lists, dictionaries, and tuples specifically for storing financial time-series metadata.
- Control Flow & Logic: Implementing if-else statements and for/while loops for iterative data processing.
- Functions & Vectorization: Writing clean, reusable code and an introduction to why vectorization is superior to loops in quant finance.

PM Session Data Preprocessing and Feature Engineering

- Defining Train and Predict Periods: Implementing a Time-Series Split to avoid data leakage and simulate real trading.
- Pandas Mastery: Loading CSV/PARQUET data, indexing by DateTime
- Computing Target Variables: logarithmic returns of stocks
- Handling Imperfect Data: Techniques for managing missing values (NaNs), outliers, and forward-filling price data to avoid look-ahead bias.
- Feature Construction: Calculating Log Returns and Volatility.
- Data Normalization: Scaling features using Z-score to prepare for Machine Learning models.
- Stationarity & Differencing: A brief look at making financial data stationary for more reliable signal generation.



DAY 2

AM Session Modeling and Generating Predictions

- Supervised Learning Overview: Selecting the right model for price prediction (e.g., Random Forests (LGBM), Elastic Net, or Linear Regression).
- Running Multiple Refit Periods with Parallelization

PM Session Performance Evaluation through Backtesting

- Key Risk Metrics: Calculating the Sharpe Ratio, Return Correlation, Up/down ratio, Dollars Traded, and Maximum Drawdown (MDD) to assess risk-adjusted performance.
- Performance Evaluation

PM Session Final Presentation (Mini Datathon)

- The Challenge: Participants work in teams to refine a strategy based on a provided dataset.
- Quant Pitching: Presenting the investment thesis, the feature engineering logic, and the backtest results.
- Peer Evaluation: Benchmarking results across teams to determine the most robust strategy (not just the highest return).



About the Speakers

The Quantitative Research team at Phitopolis specializes in the systematic discovery and development of data-driven investment signals through advanced statistical modeling, machine learning, and large-scale financial data analysis. Working at the intersection of mathematics, programming, and markets, the team transforms complex datasets into structured research pipelines that span feature engineering, predictive modeling, portfolio simulation, and rigorous backtesting. With a strong emphasis on empirical validation and implementation, the team applies quantitative methods to identify repeatable market patterns and translate research insights into robust trading strategies.



Mikki Zaballero, CFA, FRM

Mikki Zaballero, CFA, FRM, is the Head of Quantitative Research at Phitopolis International Corp., where she leads the transformation of complex investment theories into executable, code-driven strategies directly supporting a New York-based quantitative hedge fund.

With over a decade of experience across data science and trading, she specializes in leveraging machine learning and AI to develop high-precision trading signals and disciplined risk frameworks.

Mikki holds Bachelor's and Master's degrees in Applied Mathematics from Ateneo de Manila University, where she also helps shape future talent as a lecturer in the Applied Mathematical Finance program.

A global practitioner in the quantitative space, Mikki has spearheaded high-profile competitions both locally and in the U.S., including the Carnegie Mellon University and Schonfeld Datathons. To translate research insights into robust trading strategies, empirical validation and implementation, the team applies quantitative methods to identify repeatable market patterns and

About the Speakers



Marke Arellano

Marke Arellano specializes in machine learning applications in finance and has been with Phitopolis as a Quantitative Researcher for over four years. He brings over a decade of prior capital markets experience, having worked as an equities sell-side researcher and Certified Securities Representative at HDI Securities Inc.

He is a Philippine Stock Exchange Certified Securities Specialist, combining market expertise with quantitative and data-driven research approaches. He holds a Bachelor's degree in Political Science from De La Salle University Manila.



Aerjay Castañeda

Aerjay B. Castañeda is a Quantitative Researcher with five years of experience developing data-driven investment strategies. His work spans the full research pipeline, from idea generation and feature engineering to model training, portfolio construction, inference, and productionization.

He combines a technical background in programming, deep learning, and signal processing with practical experience in quantitative finance. This allows him to translate research ideas into implementable models and trading signals, bridging the gap between statistical insight and production-ready investment systems.

Aerjay holds a BS in Electronics and Communications Engineering from the University of the Philippines Diliman and is currently pursuing an MS in Computer Science, also at UP Diliman.

About the Speakers

Rod Christopher L. Barit is a Quantitative Researcher at Phitopolis with over a decade of experience in investment management. He has held key roles as Equity Portfolio Manager, Equities Central Dealer, and Investment Analyst at the Philippines' leading asset managers, BPI and Sun Life.

Rod bridges the gap between traditional finance and cutting-edge technology as an AWS Certified Machine Learning - Specialty and AI Practitioner. He holds both a BS and a Master's degree in Applied Mathematics (Mathematical Finance) from Ateneo de Manila University and recently completed his MSc in Finance Analytics at King's College London as a Chevening Scholar.

Tyrone Ashley B. Go is a Quantitative Researcher at Phitopolis, where he works across the research pipeline, from data ingestion and feature engineering to model development and backtesting.

He previously worked on Phitopolis' data science team, building ETL pipelines and Airflow workflows in Python and helping ship the data quality checks and automated reports now used across the majority of the team's pipelines. The transition into quantitative research gives him a working command of both model development and the production systems that feed it. Tyrone holds a BS in Computer Engineering from De La Salle University and is AWS Certified in Machine Learning - Specialty and Solutions Architect Associate, among other AWS and Azure credentials.



Rod Christopher Barit, CFA, CMT, FRM



Tyrone Ashley B. Go

General Refund, Substitution, and Cancellation Policy

The General Refund, Substitution, and Cancellation Policy applies to all events unless a specific event explicitly modifies it.

1. Registration

Interested participants must complete the official online registration form for the event.

2. Billing and Payment

Upon registration, a billing statement will be issued indicating the applicable registration fee, whether discounted or full, based on the participant category. The billing statement will include payment instructions and the corresponding due date.

3. Confirmation of Registration

Registration will be considered confirmed upon receipt of an email confirmation from the participant or a guarantee letter from the participant or their organization confirming attendance at the workshop or event. Such confirmation shall be deemed valid even if the payment has not yet been settled or is still under processing.

4. Confirmation Notice

Once registration has been confirmed, the participant will receive an official confirmation email containing relevant event details and instructions.

5. Substitution of Participants

A confirmed registration may be transferred to another participant upon written request sent to riena.tolores@cfaphilippines.org by the original registrant at least two (2) weeks prior to the event date. Substitution requests will not be accommodated within the two (2) weeks immediately preceding the event.

6. Refund Policy

All approved refunds will be subject to an administrative processing fee of PHP 500.00. Cancellations made four (4) weeks or more prior to the event will be eligible for a 100% refund of the registration fee, less the administrative fee. Cancellations made between four (4) weeks and two (2) weeks prior to the event will be eligible for a 50% refund of the registration fee, less the administrative fee.

7. No Refund Policy

No refunds will be granted for cancellations made within two (2) weeks prior to the event date.

8. Non-Attendance

Participants who confirm their attendance through email confirmation or submission of a guarantee letter shall remain liable for the full registration fee, even in the event of non-attendance, unless cancellation is made within the applicable refund period stated above.



General Refund, Substitution, and Cancellation Policy

9. Online Platform Access

For events that require access to an online learning platform or digital content delivery system, no refund or substitution will be permitted once access credentials or platform access have been provided to the participant.

10. Event Modification, Rescheduling, or Cancellation by the Organizer

CFA Society Philippines reserves the right to modify, reschedule, postpone, or cancel the event due to unforeseen circumstances, including but not limited to insufficient registrations, speaker unavailability, venue issues, public safety concerns, or force majeure events. If the workshop or event is rescheduled, registered participants will be notified accordingly, and their registration will automatically be transferred to the new event date. Participants who are unable to attend the rescheduled date may request either a transfer of registration to another eligible participant or a refund in accordance with the applicable refund policy. If the event is cancelled by the organizer, participants will be entitled to a full refund of the registration fee or may opt to transfer their registration to a future event, if applicable.

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