



# Internship Program



# PHITOPOLIS

## Internship Plan

Updated 16 March 2026

### 1. About the Company

**Phitopolis International Corp.** is a research and development firm supporting **Quantitative Research and Trading** for Global Hedge Fund clients. Our experienced executives have built a first-class technical team in the Philippines, adhering to international standards of excellence. With backing from investors in the **USA, Europe, and Hong Kong**, we are committed to growing Phitopolis into a **top-tier R&D firm**.

To attract and retain the best talent, we offer a competitive benefits package, best-in-class training, a flat organizational structure, and opportunities for rapid career growth, along with team-bonding events, career counseling, and an open communication environment where everyone is encouraged to contribute to our shared success.

#### Location

**Phitopolis** is located at 27/F, Ecotower, 32nd Street, Corner 9th Avenue, Fort Bonifacio Global City, Taguig City, Philippines. The office is strategically located within walking distance of several major points of interest in the city:

- **St. Luke's Medical Center** – a leading and respected private healthcare institution.
- **Food destinations** – ranging from food halls and restaurants to fine dining establishments and bars.
- **Shopping destinations** – including Market! Market!, SM Aura, Uptown Mall, Serendra, Bonifacio High Street, The Landmark, and S&R.
- **Top hotels** – such as Seda Hotel, F1 Hotel, The Grand Hyatt, and Shangri-La at The Fort.

#### Transportation

The office is accessible via various modes of public transportation, such as the Fort Bus, taxis, and private hire vehicle services. For those who choose to drive, several public parking spaces are available around the building.

## Business Hours and Dress Code

Our standard office hours are from 7:00 a.m. to 4:00 p.m, Monday through Friday. We observe Philippine holidays. Phitopolis supports relaxed and comfortable attire, aligned with the standards of most non-bank offices.

## 2. About Us

Meet our teams:

The **Data Team** at Phitopolis comprises individuals from diverse academic backgrounds, including Business, Physics, Mathematics, Computer Science, and Engineering. We operate as a full-stack team, covering the entire data lifecycle, from sourcing and preparing raw data to building and deploying robust data pipelines, to developing analytics and tools that support trading and research. Our work combines both Data Engineering and Data Science disciplines, leveraging technologies such as Python and cloud-native platforms to solve real-world challenges in finance.



The **Quantitative Research** team specializes in developing data-driven models that generate trading signals. By leveraging advanced statistical analysis and machine learning techniques, their primary focus is alpha research, identifying and constructing models that predict alpha signals to guide trading strategies across diverse asset classes.



Our researchers analyze complex datasets and often create proprietary tools and algorithms to uncover patterns indicative of profitable trading opportunities. This work demands a strong foundation in mathematics, programming, and finance, along with expertise in time series analysis, data processing, and machine learning. Within a collaborative and innovative environment, each team member contributes unique insights and techniques that continuously enhance our research capabilities.

The **DevOps** team consists of multi-skilled engineers responsible for the continuous delivery, deployment, and monitoring of applications. Their work enables the entire organization to adapt, grow, and thrive in an ever-changing business and IT landscape.

DevOps collaborates across multiple teams to find solutions and optimize processes.

The **Software Engineering** team possesses a wide range of expertise, including high-performance and distributed systems characterized by low latency and high throughput; web and programmable application interfaces that empower end users to achieve their business goals; platform development focused on seamless provisioning of on-demand compute resources; and solutions that enable large-scale data analytics.

We use a variety of technologies and programming languages including C++ and high quality, peer-reviewed C++ libraries to develop systems connecting to global financial markets, target massive storage capabilities of cloud computing platforms, and provide high level interfaces to low level facilities such as virtual filesystems.

Web applications are built using the MERN stack, Python, SQL, and NoSQL databases. So far, we have delivered online datasets management, cloud computing provisioning, cybersecurity, and real-time alerting.

**HR & Administration** is a team of talented multitaskers who enjoy solving problems and building strong, happy teams. We provide back office support to ensure employees are supported and taken care of while everyday business needs are fulfilled.



### 3. About the Program

Our Internship program aims to help students embed themselves in real-world tasks. This is achieved by allowing the students to immerse themselves in existing teams as they discover the exciting technology, projects, and people at Phitopolis.

Internship hours may be used for College credit. Evaluation of interns will be done after each program and successful interns will have priority for job placement at Phitopolis after graduation.

#### ***Requirements***

- a) A minimum of 240 hours, with at least 24 hours per week or 8 hours per day
- b) In-office attendance at our BGC office
- c) Per diem may be provided to help with transportation and other costs

#### **Points of Contact**

To inquire about the internship hiring process, you may submit your application through the link provided on our official website and complete the application form. For further details, feel free to contact us via our official email address.

- ✉: [jobs@phitopolis.com](mailto:jobs@phitopolis.com)
- 🌐: <https://phitopolis.com/>

### **Updates and Annual Review**

Phitopolis International Corp. will update this plan whenever there is a material change to our operations, structure, business, or location.



# INTERNSHIP - Data Science & Engineering

## **A. Knowledge and skills that the students will gain from their Data Science & Engineering internship at Phitopolis**

At Phitopolis, our full-stack Data Team blends both Data Science and Data Engineering. Interns gain hands-on experience working with financial, core reference, market, and quant (alternative) data. You'll learn how to build data pipelines, analyze datasets, ensure data quality, and contribute to real-world solutions that support trading and research.

During the internship, you'll process and transform large-scale datasets, design and maintain data infrastructure, and apply statistical or modeling techniques to uncover insights. You'll work with real financial data and take part in supervised code deployment. This experience is designed to sharpen both engineering and analytical skills, preparing you for data-driven roles in the industry.

## **B. Deliverables and/or project goals expected from the students, including project presentation at the end of the internship, if applicable.**

Interns will complete an end-to-end project combining data engineering and data science. Typical projects involve exploratory data analysis (EDA) and building automated pipelines using Airflow. Throughout the internship, students are expected to:

- Build workflows using Airflow, AWS, DuckDB, and Python
- Perform EDA on financial and alternative datasets
- Script data collection, processing, and validation
- Maintain data quality throughout the pipeline
- Suggest improvements to existing processes

At the end of the internship, students will present their project outcomes to the Data Team.

## **C. Supervision/coaching plans during the internship**

Each intern will be paired with a dedicated mentor from the Data Team for technical guidance and support. Interns will also have access to a shared communication channel for collaboration, including support from DevOps when needed.

## **D. Progress monitoring and feedback process**

Interns will participate in regular team standups to share progress and receive feedback. Project milestones and goals are reviewed continuously to keep work on track and aligned with learning objectives.

# INTERNSHIP - Software Engineering

## **A. Knowledge and skills that the students will gain from their Software Engineering internship at Phitopolis**

The students will gain first hand experience in software development in a real-world setting. This starts from identifying features or issues, prioritizing them, breaking them up into simpler chunks which should be easier to address, followed by code development and peer review. They will also gain an appreciation of how production issues are addressed.

Students will be able to apply their knowledge of data structures and algorithms in understanding the code that they are going to build on with a focus on correctness, stability and performance.

Students will be able to apply their knowledge in distributed application development particularly the client-server model. They will also be able to practice a structured software development methodology in Scrum.

## **B. Deliverables and/or project goals expected from the students, including project presentation at the end of the internship, if applicable**

Students will be exposed to the agile methodologies - one of the 2 most common software development methodology used in the IT industry. They will learn about the process of breaking down complex problems into smaller and manageable chunks.

Students will be able to write production code assisted by a developer and later on, write production code by themselves where the output will be reviewed by a peer developer.

Students will have a chance to review code written by a peer developer. They will also have first hand experience of releasing software into a production environment.

Students will witness the process of diagnosing a production issue or analyzing the root cause of a problem by looking at software artifacts such as logs and core dumps.

## **C. Supervision/coaching plans during the internship**

A person or two from the Software Engineering team, depending on the number of students, will be assigned to directly handle the students in doing their project but everyone in the team is available for consultation.

## **D. Progress monitoring and feedback process**

The students will participate and share in the regular standup meetings and inform the team about their progress by answering the following questions:

- What did I work on yesterday?
- What am I working on today?
- What issues are blocking me?



# INTERNSHIP - DevOps

## A. Knowledge and skills that the students will gain from their DevOps internship at Phitopolis

- Build knowledge in handling Production Environments
- Unix/Linux-based operating system administration
- Networking and System Interconnectivity
- Cloud-based architecture
- Systems Deployment and Configuration
- Shell Scripting and other automation tools
- Python Programming
- Collaboration and code repository
- Build an understanding of financial trading operations
- Stakeholder management
- Technical Writing and Documentation

## B. Deliverables and/or project goals expected from the students, including project presentation at the end of the internship, if applicable.

Week	Task	Requirements	Goals	Course Percentage Completion
1	Setup Linux Virtual Environment  Tooling and navigation  User Management and Security	VirtualBox Centos 7 Built-in utils	Learn how to setup a Linux system  Learn the tools to navigate and identify the components of the system	15%
2	Administration  Configure Networking  Software Installation and administration	Virtual Box Centos 7 Built-in utils Httpd	Set up the systems so as to create an environment that is interconnected  Create a simple webservice	30%
3	Automation	Virtual Box Centos 7 Built-in utils Httpd Bash scripting Ansible Python	Automate the tasks that were done in weeks 1 and 2	60%
4	Cloud Computing	AWS - Free Tier Ec2 Docker	Build the exercises in weeks 1 and 2 using cloud computing technologies	80%

6	<b>Collaboration and Code Repository</b>  <b>Automated Deployment</b>	<b>AWS - Free Tier</b> <b>Ec2</b> <b>Docker</b> <b>Gitlab free</b> <b>Ansible</b> <b>Terraform</b>	<b>Supplement exercise 4 with a code repository and automated deployment</b>	<b>100%</b>
---	-----------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------	-------------

**C. Supervision/coaching plans during the internship**

Interns will rotate through different DevOps members and will be taught based on the members' domain expertise, such as Data Operations, Platform support, Trading Support, and Cloud Architecture. The main goal is for them to build both technical and domain knowledge.

**D. Progress monitoring and feedback process**

The interns will participate in and share in the regular standup meetings and inform the team about their progress by answering the following questions:

- What did I work on yesterday?
- What am I working on today?
- What issues are blocking me?



# INTERNSHIP - Quantitative Research

## **A. Knowledge and skills that the students will gain from their Quantitative Research internship at Phitopolis**

The Quantitative Research internship at Phitopolis immerses students in the full workflow of quantitative financial research. Interns are granted access to real-world financial and alternative data sources, which they employ to design and implement theoretically motivated features that reflect underlying economic mechanisms. Using these engineered features, interns construct models that generate alpha signals and subject those signals to an iterative process of rigorous back-testing. In parallel, students both learn and develop research tools that strengthen each stage of the empirical pipeline.

## **B. Deliverables and/or project goals expected from the students, including project presentation at the end of the internship, if applicable.**

Each intern completes two main assignments. The first, a Tool Enhancement Project, systematically extends or creates research utilities to improve data handling, feature generation, or analytic reproducibility. The second, an Alpha Research Project, entails formulating an investable hypothesis, constructing an econometrically defensible experimental design, and evaluating results across multiple market regimes. Weekly progress reports serve as structured checkpoints. The internship culminates in a discussion with our partners, where interns submit well-documented code and deliver an oral presentation that elucidates their strategy, findings, and economic interpretation.

## **C. Supervision/coaching plans during the internship**

Interns are paired with a research mentor whose disciplinary expertise aligns with the assigned projects. This mentor provides continuous guidance, offering detailed methodological critiques and ensuring that each analytical decision coheres with the project's overarching objectives. Additional support from data-engineering and production-systems specialists is available through a dedicated communication channel, facilitating prompt resolution of technical issues. Routine stand-up meetings, complemented by impromptu problem-solving sessions, foster an environment of sustained scholarly dialogue and critical inquiry.

## **D. Progress monitoring and feedback process**

Interns present interim results in weekly catch-ups, receiving constructive feedback from both their assigned research partner and the broader team. Phitopolis prides itself on a collaborative culture in which members actively support one another's projects; throughout the internship

period, interns can expect timely assistance and guidance on any research, technical, or methodological issue that arises.

