# Francis Mark M. Cayco

https://petecastle.github.io

⊘ Bacoor, Cavite, PH | ☎ +63 999 036 8778 | ✉ francis_mark_cayco@yahoo.com

🔗 linkedin.com/in/francis-mark-cayco-33511a190

4th Year Computer Engineering student that is proficient in Python, C++, JavaScript, Java, and a range of data tools like Pandas, Numpy, Tensorflow. Currently working as a part-time Backend Developer at Bitskwela, developing a Web 3.0 product with Django and HTMX. Actively involved as Data Science Lead at Google Student Developer Clubs, training and sharing my knowledge of data science to aspiring professionals.

## TECHNICAL PROFILE

**Languages**: Python, C++, JavaScript, Java
**Data Science & Big Data Analytics**: Pandas, Numpy, Matplotlib, Tensorflow, PostgreSQL, PowerBI, Jupyter
**Data Engineering**: Prefect, Airflow, data build tool *(dbt)*, Spark
**Cloud**: Azure, Amazon Web Services
**CI/CD**: Git, Github
**Web Development**: HTML, CSS, Node.Js, Django, HTMX, APIs

## WORK EXPERIENCE

**BACKEND DEVELOPER INTERN**                                               Jul - Oct 2023
**BACKEND DEVELOPER**                                               Oct 2023 - Present
Bitskwela
- Architected a Web 3.0 product using Django framework incorporating HTMX to incorporate communication protocols such as webhooks, WebSocket, and HTTPs.
- Employed Digital Ocean for efficient and scalable cloud deployment; as well as managing the website's Database Management System.
- Collaborated effectively within a small team comprising frontend, UI, and UX developers using GitHub and Figma for a cohesive and comprehensive project delivery.

## VOLUNTEER EXPERIENCE

**GOOGLE STUDENT DEVELOPER CLUBS – PAMANTASAN NG LUNGSOD NG MANILA**          Manila, PH
Data Science Lead                                               Aug 2023 – Present
- Facilitated training sessions and study jams for data enthusiasts within the campus community.
- Initiated and managed the distribution of DataCamp Donates scholarships, aiding aspiring data science practitioners from both within and outside the institution.
- Fostered collaboration with international GDSC chapters to develop a social media application that connects users according to their skills and interests.

## EDUCATION

**PAMANTASAN NG LUNGSOD NG MAYNILA** (University of the City of Manila)          Manila, PH
Bachelor of Science in Computer Engineering                                 Expected Sept 2024
Cumulative GWA: **1.2278** (on a 1.0-5.0 scale)
Programming Coursework: Software Engineering; Operating Systems; Data Structures and Algorithms; Computer Architecture and Organization

**FAR EASTERN UNIVERSITY - ALABANG**                                 Muntinlupa City, PH
Science, Technology, Engineering, & Mathematics with Specialization in Computer Science          Oct 2018 - 2020
*With Honors*
Final Grade: 94.00

## TRAININGS AND CERTIFICATIONS

### DATA ENGINEER PATHWAY COMPLETER
Nov 2023
Development Academy of the Philippines
- Mastered theoretical concepts of data engineering, covering data pipelines, warehousing, and optimization strategies.
- Explored data governance principles, ethical considerations, and policy frameworks.
- Specialized in data governance, public policy, and computing within a peer-assessment grading system.

### DATA ENGINEER ASSOCIATE
Jul 2023
DataCamp
- Demonstrated adeptness in handling data through effective organization, storage, and retrieval techniques.
- Utilized advanced data engineering concepts such as data modeling and transformation to optimize data for downstream processing and analysis.

### DATA ENGINEERING ZOOMCAMP
May 2023
DataTalks.Club
- Concentrated on core data engineering concepts from ETL from data ingestion, storage, and warehousing.
- Worked with NYC's Taxi Database as the primary data source for hands-on learning through Prefect's data ingestion techniques then transferred into Azure Blob Storage.
- Gained experience with Prefect for orchestrating ETL flows and data processing while enhancing skills in warehouse orchestration using dbt for efficient data management.

### DATA SCIENTIST PROFESSIONAL
Aug 2022
DataCamp
- Demonstrated efficiency in data management, programming, exploratory analysis, model development, statistical experimentation, and effective communication.
- Showcased expertise in Python and SQL by completing real-world data science tasks and presenting results to a panel of industry experts.

## PROJECTS

*All my personal projects are published on [my GitHub profile](#).*

### INTEGRATED MOSQUITO DETECTION AND FUMIGATION UTILIZING FASTER REGION-BASED CONVOLUTIONAL NEURAL NETWORKS
- Engineered an advanced detection system using Faster Region-Based Convolutional Neural Networks for accurate mosquito identification; as well as a luring system capable of attracting mosquitos to the observation panel.
- Developed a robust fumigation system eliminating mosquitoes within a 10-meter radius.
- Created a real-time analytics dashboard displaying detection metrics and fumigation effectiveness, alongside an integrated software solution for collaborative mosquito control efforts.

### DATA ENGINEERING ZOOMCAMP PROJECT
- Developed League of Legends Analytics, a software-based project that provided users with current trends in gameplay to improve their skills and gameplay strategies.
- Utilized an extract, transform, and load (ETL) model and the League of Legends public API to obtain player data, including match results and league details, then used dbt and Prefect for workflow orchestration, and Azure cloud for data storage and Spark cluster.
- Acquired extensive knowledge of data engineering concepts, including data warehousing, ETL processes, data modelling, and data analytics.

### KILOGTASAN: ARDUINO FLOOD WARNING SYSTEM
- Developed a real-time flood monitoring and warning system using Arduino and IoT technology.
- Implemented an SMS-based warning system for timely disaster preparedness and response
- Enhanced disaster risk management and safety measures for barangay sectors.
- Gained comprehensive understanding of the Arduino ecosystem and IoT systems in general.