



DINH THANH PHONG

Data Engineer, Data Platform Engineer,
DevOps, Power Platform Engineer



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GitHub:
<https://github.com/PhongDinhCS>



Youtube_channel:
<https://www.youtube.com/@PhongDinhCS>



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Tân Chánh Hiệp Ward, District 12, HCM



Working experience: 5 years



Male

Technical Skills

SharePoint Administration

Microsoft Power Apps, Microsoft Power Automate

Microsoft Dynamics 365

Data Visualization: Microsoft Power BI

Big Data Technologies: Apache Spark, Kafka, Hadoop, Hive, Delta Lake

Programming Languages: Python, Pyspark, RESTful Web APIs with Flask, Jupyter Notebook

Summary

Experienced Senior Laboratory Information System Officer with a strong background in designing and managing Laboratory Information Management Systems (LIMS). Skilled in data migration, SOP development, and process automation. Currently completing a Master's thesis in Computer Science with a focus on Data Engineering and Big Data.

Passionate about continuous learning and data-driven decision-making.

Currently, I am balancing duties as both an Information System Officer and an Instrument Officer. **I am now ready to fully focus on the data-driven field to accelerate my growth.** My goal is to advance my skills in data warehousing and build a long-term career in a Big Data environment.



Key Projects

Personal Master Thesis Project (2023-2024) (Main Learning Project):

- Building an On-Premises Data Lakehouse for Big Data Storage and Analysis
- I have set up several containers, including **Kafka, Hadoop, Hive Metastore, PostgreSQL, and Delta Spark**, all of which have been successfully tested with a **Flask API, Jupyter Notebook, and Power BI**. I then implemented an ETL pipeline to process web-crawled stock market data and display reports on Power BI. All containers were built using official images from Docker Hub.
- Please see the project at <https://www.youtube.com/@PhongDinhCS>
- https://github.com/PhongDinhCS/PhongDinhCS-data_lakehouse

Master Subject Project (2022-2023):

- Completed various projects as part of the learning process in Data Engineering, Big Data, Data Mining, Data Science, Data Analysis and Machine Learning. Please see the Github Repository (<https://github.com/PhongDinhCS/Master-Subject-Project>)

OUCRU Laboratory Information Management System (2022-2024) (Main Work Project):

- Led the development of a Laboratory Information Management System from the ground up. Designed and built the system on SharePoint, created PowerApps and Power Automate workflows, implemented data backup strategies, and developed SOPs. Conducted user training to ensure effective system use and compliance.

OUCRU Microsoft Dynamics 365 Finance and Operations (2021-2023):

- Collaborated with various departments to coordinate with the vendor in deploying the system over three years. Led data migration efforts for the Lab Management team and provided support for data migration across other teams.

Implement Sensor Monitoring Systems _ Labguard and Jri Mysirius (2019-2022):

- Gathering requirements, contacting vendors, collecting quotations, and selecting products. Managed the setup of systems. Implemented and managed over 200 sensors including wireless sensors for temperature, humidity, and pressure.



Work experience

SENIOR LABORATORY INFORMATION SYSTEM OFFICER

May 2023 - Present

Oxford University Clinical Research Unit (OUCRU)

- Designed and built the SharePoint site for the Laboratory Information Management System (LIMS). Served as an administrator, managing permissions and access control for around 300 users across multiple sites.
- Developed Standard Operating Procedures (SOPs) for implementing processes, ensuring data security, and managing data backups on the LIMS.

Query Language: SQL, NoSQL (PostgreSQL, MySQL, Scala)

DevOps: Docker, GitHub, Linux, Airflow

ETL (Extract, Transform, Load)

Cloud: Azure

Machine Learning: Classification, Clustering, Predicting Forecasting

Sensor Configuration and Calibration

Certifications

Oxford University Clinical Research Unit Internal Training

Train The Trainer

Oxford University Clinical Research Unit Internal Training

Information Security and Data Privacy

Accreditation Office for Standards Conformity Assessment Capacity (AOSC) Internal Auditor Training

National University of Singapore (NUS) BSL3 Operation and Risk Management

The National Institute of Hygiene and Epidemiology (NIHE) BSL3 training

QUATEST3 Calibration of lab measurement devices

Languages

- Vietnamese: Native
- English: Approximately IELTS 6.5 (Planning to obtain an official certificate in Dec 2024)

Interests

- Sport: Football, Boxing, Judo
- Volunteer: Charity and Environment
- Learning: Software, Automation Tools, Security, Standard, Economic, Finance

- Implement advanced digital tools, including Microsoft Power BI, Power Apps, and Power Automate, to enhance data reporting and process automation.
- Organized and conducted regular training sessions as a trainer to guide the operation of LIMS and GCLP standard for laboratory instruments.
- Participated in a project to upgrade Microsoft Dynamics 365 Finance and Operations and migrated data from Dynamics 2009 to D365.
- Contribute on Microsoft Dynamics 365 project for efficient data management and analysis, streamlining workflows and improving data accessibility.
- Developed and implemented strategies for fixed asset management, budget forecasting, and risk management to ensure efficient resource utilization.

BIOLOGICAL SAFETY LABORATORY LEVEL 3 TECHNICIAN

June 2019 - May 2023

Oxford University Clinical Research Unit (OUCRU)

- Manage sensor monitoring systems.
- Developed Standard Operating Procedures (SOPs) for data management and equipment usage. Conducted data analysis on equipment performance.
- Managed purchasing orders and updated reports on the Dynamics system.
- Planned preventative maintenance programs and coordinated with maintenance vendors to adapt with GCLP/ISO standard for critical assets.
- Calibrated temperature monitoring systems and laboratory instruments follow GCLP/ISO standard.

Education

MASTER'S DEGREE IN COMPUTER SCIENCE

Jan 2022 - Completing Final Thesis

Ho Chi Minh City University of Technology (Bach Khoa University)

- Data Engineering (Main Thesis Project)
- Data Warehouse, Data Lake, Data Lakehouse (Main Thesis Project)
- Big Data and Data Mining
- Data Science and Data Analysis (Linear/Logistic regression)
- Machine Learning and Deep Learning (Naive Bayes, KNN, K-means, Decision Tree, Random Forest, ANN, SVM)
- Programming and Query Languages: Python, Scala, SQL, NoSQL

BACHELOR'S DEGREE IN ENGINEERING MECHANICS

Sep 2015 - June 2019

Ho Chi Minh City University of Technology (Bach Khoa University)

- Engineering Mechanics
- Engineering Simulation Software: Ansys, AutoCAD, Inventor, Solidworks
- Programming Language: #C

Soft Skills

- Strong Communication: both inside and outside the organization.
- Continuous Learner: Eager to learn, apply knowledge and improve work processes.
- Problem-Solving Skills: Good at finding solutions and analyzing problems.
- Data-Driven: Uses evidence-based and logical thinking.
- Risk Assessment: Skilled in identifying and managing risks.
- Data Security Focus: Strong understanding of data protection.
- Team Player: Works well with others and contributes to team goals.
- Confident Trainer: Comfortable and enthusiastic about training others.
- Independently: Capable of working independently, including working overseas.

References

Available upon request.



Please see Main Learning Project On-Premises Data Lakehouse for Big Data Storage and Analysis - Instruction and Demo

<https://www.youtube.com/@PhongDinhCS>



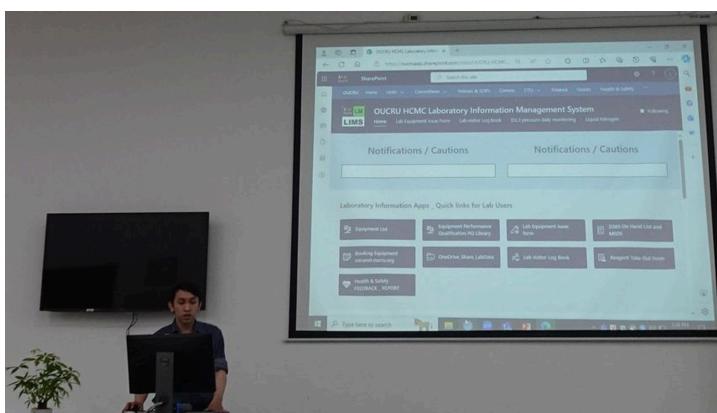
Please see the Github Repository for the Main Learning Project On-Premises Data Lakehouse for Big Data Storage and Analysis

https://github.com/PhongDinhCS/PhongDinhCS-data_lakehouse



Please see various Master Subject Project as part of the learning process for Computer Science Program at the Github Repository

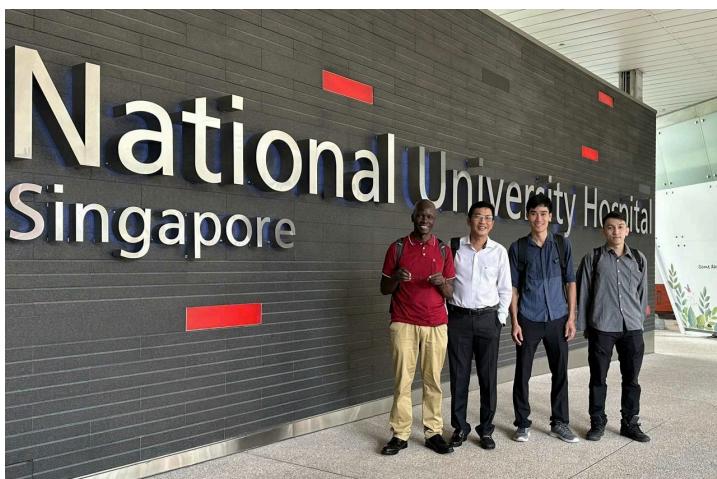
<https://github.com/PhongDinhCS/Master-Subject-Project>



Conducting training for Laboratory Information Management System



Conducting training for Laboratory Information Management System



Attended the training at NUS for BSL3 Operation and Risk Management



Certificates in First Aider Training and Firefighting Team at OUCRU

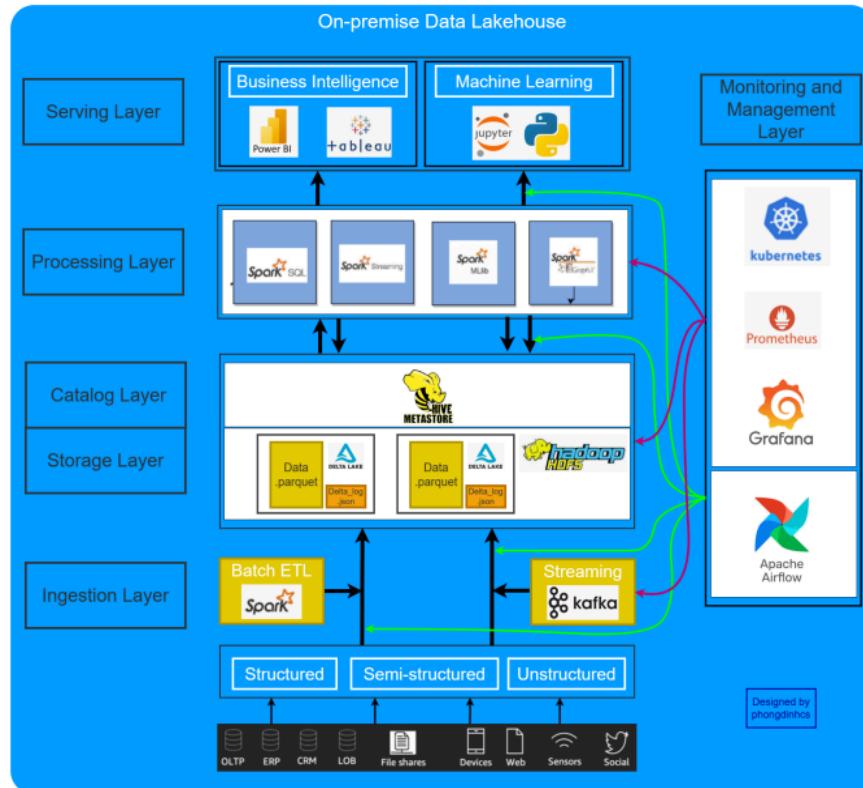
DPhil Opportunity

Pneumococcal infections in children in Vietnam: a whole genome study

Working at Oxford University Clinical Research Unit



Working independently in Nepal to conduct training for OUCRU Nepal, helping them follow SOP and GCLP



OUCRU HCMC Laboratory Information Management System

The screenshot shows the SharePoint interface for the OUCRU HCMC Laboratory Information Management System. Key features displayed include:

- Notifications / Cautions:** Two empty boxes for displaying alerts.
- Laboratory Information Apps:** Quick links for Lab Users, including:
 - Equipment List
 - D365 On Hand List and MSDS
 - Reagent Take Out Form
 - Lab Equipment issue form
 - Booking Equipment intranet.oucru.org
 - Health & Safety FEEDBACK .. REPORT
 - Issue Form: Estate / IT Service Desk / Lab Management
 - OneDrive_Share_LabData
 - LIMS instruction
 - Equipment Performance Qualification PQ Library
 - Lab visitor Log Book
- QR Codes:** QR codes linking to D365 On Hand List and MSDS, and OUCRU _ Equipment Maintenance Log Sheet for Engineer.

Power Apps | Lab_Reagent Take Out Form_Reagent Preparation Room

The screenshot shows a Power App form titled "Reagent Take Out Form". The form includes the following fields and sections:

- Header:** New Form, Date (31 December 2001), Group (*Group), User name (*Users name), Note (if any).
- Section:** Lab Management, Reagent Take Out Form. A note says: "Please always fill out this form when you take item from Reagent Preparation Room".
- Items:**
 - Yellow tip
 - ELGA
 - Nitrile XS
 - Pipettes pastuer
 - White tip
 - PBS
 - Nitrile S
 - Puppy paper
 - Blue tip
 - TBE
 - Nitrile M
 - Roto paper
 - Eppendorf box
 - Falcon 15ml
 - Nitrile L
 - PCR box
 - Eppendorf bag
 - Falcon 50ml
 - Macro XS
 - Reservoirs
 - pipette 5ml
 - pipette 10ml
 - pipette 25ml
 - Sharps Containers (hũi kim)
 - Mask
 - other (item name)
 - quantity
- Buttons:** Submit.
- Table:** A summary table at the bottom showing the count of items taken.