PHATPICHA (MINK) YOCHUM

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Personal Profile

Data Scientist with 2+ years of experience in MedTech startup. Skilled in using Python for data analysis and machine learning, with experience in developing predictive models and computer vision tasks. Experienced in using data mining techniques to uncover insights from large datasets, and data processing to improve data quality. Proficient in using tools such as Tableau and Power BI for data visualisation. Possess a passion for solving business problems through data-driven solutions. Strong self-starter, highly accountable, and motivated individual.

Skills

- Language: Python, SQL, JavaScript, HTML/CSS
- Cloud platform: Google Cloud Platform, AWS, Heroku
- Machine Learning: Classification, Regression, Clustering, Image Segmentation, Object Detection, Human Pose Estimation
- Open-source library: Scikit-learn, TensorFlow, PyTorch, OpenCV
- Visualisation tool: Power BI, Tableau, Looker Studio
- Additional: Git, Airflow, Agile

Work Experience

Data Scientist (Remote)   Thailand
Ever Medical Technologies   Aug 2020 – Present

- Scraped 10+ internal and external sources of health information, resulting in an 80% increase in data availability, and prepared data for analysis using Selenium, Python, and SQL.
- Monitored data pipeline using Python to clean, analyse, and transform 20M+ patient and health condition data for generating actionable insights, creating a 75% reduction in routine operations.
- Leveraged data visualisation using Tableau and Power BI for healthcare professionals and government officials, resulting in a 60% increase in data-driven decision-making and improved collaboration between stakeholders.
- Built predictive models such as SVM, Random Forest, and XGBoost with 89% accuracy to identify future health trends in a population and inform new facility recommendations.
- Researched topic modelling techniques to automate disease prediction based on symptoms, enabling medical triage and common disease diagnosis efficiency by 87% for better screening, diagnosis, and treatment.
- Developed automated cancer segmentation models, reducing pathologist time by 40 minutes per slide and leading to a 92% in diagnostic accuracy.
- Enhanced accuracy of sleep apnoea diagnosis by 86% using a convolutional neural network (CNN) to classify sleep apnoea stages using variables from time-domain polysomnographic recordings.
- Created a crisis system using YOLOv7 object detection for suicide classification and CNN algorithm for fall detection, significantly reducing response time to emergencies and false alarms by 76%.
- Led to a 29% sales growth by building a medical product recommendation engine for an eCommerce Chatbot.

Computer Technical Officer   Thailand
Ministry of Education   Sep 2016 – Aug 2017

- Interpreted user segmentation analysis by clustering demographic and lifestyle data to identify patterns and behaviours over 350,000 data points using Excel and Python.
- Generated Power BI dashboards to visualise key insights for the board of directors by synthesising data from multiple sources, including CRM and web analytics tools, saving 10 hours per week of manual reporting work.

Programmer   Thailand
Sawanpracharak Hospital   Jan 2013 – Aug 2016

- Designed ETL processes to transfer data from various sources to data warehouse platforms like PostgreSQL and MySQL, ensuring data quality and integrity and cutting down manual time by 15 hours per week.
- Formulated data analysis and reporting using Excel and Crystal Reports to provide insights on key business metrics and make data-driven decisions for 130+ suburbs in the city.

- Implemented new electronic health records (EHR) system, restructuring communication flow among all departments, and cutting down paperwork by 70%, saving 30+ hours per week in administrative work.

System Analyst and Programmer   **Thailand**
Multi Asset Management   Jul 2010 – Dec 2012
- Collaborated with cross-functional teams to gather user requirements and analyse workflow processes.
- Launched internal applications using C# and .NET framework to improve system efficiency and productivity, resulting in a 25% increase in workplace satisfaction.
- Integrated and maintained data flows between systems and databases using SQL Server Integration Services (SSIS).
- Conducted reports using SQL Server Reporting Services (SSRS) to provide stakeholders valuable insights and empower business users to make informed decisions.

Programmer   **Thailand**
Yip In Tsoi   Jul 2009 – Jun 2010
- Revamped HR web-based application with ASP.NET MVC framework and SQL Server, resulting in a 10% reduction in customer complaints.
- Optimised database schema and queries to ensure data quality and integrity.

Education

Guilin University of Electronic Technology   **China**
PhD in Information and Communication Engineering   Sep 2017 – Jul 2020
- Areas of Study: Knowledge Graph, Recommender Systems, Machine Learning
- PhD Thesis: Recommendation System Based on Knowledge Graph

Rangsit University   **Thailand**
Master of Science in Information Technology   Aug 2015 – Jul 2017
- Areas of Study: Data Analytics, IT Management
- MS Thesis: Business Intelligence Tools for Health Data Analytics

Mae Fah Luang University   **Thailand**
Bachelor of Science in Software Engineering   May 2005 – Mar 2009

Training

Data Engineering and Analytical Tools Bootcamp   **UK**
Gateshead College   Jan 2023 – Present

DevOPs Bootcamp   **UK**
Gateshead College   Nov 2022 – Dec 2022

Certificates
- Completed over 15 certified MOOC courses on mathematics, machine learning, deep learning, and recommendation system.