PHATPICHA YOCHUM

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Summary

Data Scientist with a passion for solving business problems through data-driven solutions. 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 visualisation tools to deliver valuable insights. Strong self-starter, highly accountable, and motivated individual.

Skills

- Programming 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) – Ever Medical Technologies **–** Thailand August 2020 - Present

- Scraped 10+ internal and external sources of health information, resulting in an 80% increase in data availability using Selenium, Python, and SQL.
- Implemented data pipeline using Python to clean, analyse, and transform 20M+ patient and health condition data for generating actionable insights, reduced routine operations by 75%.
- Leveraged data visualisation using Tableau and Power BI to generate actionable insights and improve collaboration between stakeholders, resulting in a 60% increase in data-driven decision-making.
- Developed predictive models using Neural Network with 89% accuracy compared to three baseline models: Logistic Regression, Random Forest, and XGBoost 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%.
- Built 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 from variables in 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 – Ministry of Education – Thailand September 2016 - August 2017

- Interpreted user segmentation analysis by leveraging Excel and Python to cluster demographic and lifestyle data, resulting in the identification of patterns and behaviors across 350,000 data points.
- 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 – Sawanpracharak Hospital – Thailand January 2013 - August 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 & Programmer – Multi Asset Management – Thailand July 2010 - December 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 – Yip Int Soi – Thailand July 2009 - June 2010

- Updated 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

Doctor of Philosophy – Guilin University of Electronic Technology – China September 2017 - July 2020

- Major: Information and Communication Engineering
- Areas of Study: Knowledge Graph, Recommender Systems, Machine Learning
- Thesis: Recommendation System Based on Knowledge Graph

Master of Science – Rangsit University – Thailand August 2015 - July 2017

- Major: Information Technology
- Areas of Study: Data Analytics, IT Management
- Thesis: Business Intelligence Tools for Health Data Analytics

Bachelor of Science – Mae Fah Luang University – Thailand May 2005 - March 2009

- Major: Software Engineering

Training

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

- Utilising R Studio to perform data wrangling and cleaning
- Training Azure Data Fundamentals

Devops Bootcamp – Gateshead College **–** UK October 2022 - December 2022

- Developed Continuous Integration and Continuous Deployment (CI/CD) pipelines using automation tools like Jenkins, Kubernetes, and Docker on AWS.
- Learned DevOps principles and best practices.

Certificates

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