### **VALENTINO ONG**

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#### **WORK EXPERIENCE**

## Al Intern, NCS

May 2024 - Aug 2024

- Led a project from an overseas client to automate tender analysis process using Gen AI from scratch
- Achieved a 95% reduction in time taken for manual processing of 1000+ pages of documents
- Projected cost savings of over \$50,000 by reducing manual effort and increasing operational efficiency
- Collaborated with stakeholders for requirements gathering and presented project plan and performance insights across use cases, leading to client approval.
- Designed and developed the full-stack solution, leveraging Retrieval-Augmented Generation (RAG) framework and advanced prompt engineering techniques to deliver accurate and efficient outcomes

## **Data Scientist Intern, Galen Growth**

Jun 2023 - Aug 2023

- Achieved 90% accuracy in classifying news and companies from unstructured data using machine learning models (multi-label classification), eliminating manual work entirely.
- Develop automated data web scraping scripts in Python using BeautifulSoup and Selenium, achieving an 80% reduction in time spent extracting data from online sources.
- Statistical analysis, processed, cleaned, and formatted various data using Numpy, Pandas, MySQL and Excel
- Designed database schema and implemented ETL pipeline to insert thousands of data into database

#### **EDUCATION**

## SINGAPORE MANAGEMENT UNIVERSITY

Aug 2021 - Apr 2025

# **Bachelor of Computer Science (AI & Business Analytics)**

- Honors: Magna Cum Laude / Highest Distinction
- GPA: 3.69 / 4.00
- Dean's list AY24-25 & AY23-24, Trailblazer ASEAN Scholarship -2024, 2023, 2022 and 2021
- Teaching Assistant (Intro to AI & Analytics Foundation)

#### **PROJECT**

## AIP National AI Student Challenge 2024 (GitHub Repository)

Shorted listed for Final stage in track 1: AIP Association challenge problem for pet adoption rates prediction

- Performed EDA on PetFinder.my data to clean and filter dataset of 14,993 rows of data and 49 features
- Built an end-to-end Machine Learning pipeline that include data preprocessing and utilizes machine learning algorithms such as XGBoost and Random Forest to predict pet adoption rates

#### **Capstone Project: Twinsies (Role: Project Lead)**

Develop Gen Al-powered digital twin for education to automatically generate personalized learning recommendations

- · Led a cross-functional team using Agile scrum methodology, acted as the liaison between sponsors and team
- Full-stack developer using FastAPI and ReactJS
- Developed a complete CICD pipeline and deployed using Docker
- Lead of Gen AI, including prompt engineering and evaluating output to optimize recommendations

# Smart Energy Analysis using AWS & GenAl

Scalable ETL and analytics pipeline to optimize solar energy adoption strategies using big data

- Built an automated big data ETL pipeline using AWS Glue and PySpark to process millions of records
- Applied clustering using AWS SageMaker to segment customer groups to identify high-potential targets for solar energy adoption strategy optimization
- Enabled retail strategy optimization by delivering insights through interactive GenAl chatbot for stakeholders

## LinkedOut: Resume and Job Matching Recommendation System

Built a recommendation system using Doc2Vec and FAISS to match resumes with job descriptions and vice versa

- Developed a semantic search model for candidates to find suitable jobs and recruiters to find ideal candidates
- Leveraged FAISS for similarity matching and Doc2Vec embeddings to capture contextual meaning from text
- Developed the backend REST APIs using FastAPI for resume-to-job and job-to-resume recommendations

### **SKILLS & INTERESTS**

- **Certification**: Udemy Data Science and Machine Learning bootcamp, Udemy Taming Big Data with Apache Spark and Python, Google Career Data Analytics, AWS Certified Solutions Architect Associate
- Programming Languages: Python, SQL, Java & C
- Data Science & Analytics: Data Mining, Machine Learning, Gen Al, PySpark, NLP, Web scraping & Tableau
- Web Development/Frameworks: FastAPI, Streamlit & Spring Boot
- DevOps & Deployment: Docker, Kubernetes, CI/CD pipeline development, AWS
- Language fluency: Effectively bilingual in English and Indonesia, Chinese (A-level) & Malay