# MICHELLE TOLENTINO

michellentolentino@gmail.com | (+63) 976 289 1389 | Manila, Philippines | LinkedIn | Github

## **EDUCATION & HONORS**

## Pamantasan ng Lungsod ng Maynila, local university

Manila, PH

College of Information Systems and Technology Management (CISTM)

Bachelor of Science in Computer Science

September 2022 – Present

- Cumulative GWA for five (5) semesters: 1.0757 (Grade Equivalent: 98-100)
- College and University Excellence Awardee (Garnered the highest GWA throughout the CISTM college and the University in her batch, S.Y. 2022-2024)
- Relevant Coursework: Object Oriented Programming, Data structures and Algorithm, Algorithms and Complexity, Information Management, Information Assurance Security, Programming Languages, Software Engineering 1, Intelligent Systems, Applications Development and Emerging Technologies

## Polytechnic University of the Philippines, coeducational state university

Manila, PH

Senior High School

Science, Technology, Engineering, and Mathematics (STEM)

October 2020 – July 2022

- With High Honors, overall grade of 98.01
- Batch Valedictorian

# **EXPERIENCE**

Headstarter Al San Francisco, California, USA

Software Engineering Fellow

July 2024 - September 2024

- Delivered AI projects within the fellowship duration.
- Served as the project lead, collaborating with international Computer Science students from UC Irvine and Minnesota State University.
- Participated in weekly meetings, workshops, and talks featuring global industry leaders and seasoned professionals.

#### Google Developer Student Club (GDSC) PLM

Manila, PH

Data Science Committee Lead

August 2024 - Present

- Designed and implemented a Document and Receipt Automation System, streamlining processes for operations and finance committees.
- Facilitated a partnership with DataCamp for the annual DataCamp Donates Scholarship program.
- Led workshops on data science and machine learning for committee volunteers, enhancing technical skills and project readiness.
- Coordinated volunteering committees for bootcamps, hackathons, and networking events within the Technology Department.

AWS Cloud Clubs - Haribon

<u>Manila, PH</u>

Artificial Intelligence & Machine Learning Co-Lead

September 2024 – Present

• Conducted hands-on workshops featuring AWS AI and Machine Learning services, including AWS Bedrock, Amazon Translate, Amazon Textract, and Amazon SageMaker.

## SKILLS

# **TECHNICAL SKILLS:**

- Programming Languages: Java, Python, SQL, C, C++, JavaScript, Dart
- Web Development: HTML5, CSS3, React, Node.js, Material UI, REST APIs
- Data Science & Al / Machine Learning: Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn, NLTK, PyTorch, TensorFlow, Data Analysis and Engineering, Jupyter Notebook
- DBMS/Baas: MySQL, PostgreSQL, Firebase
- Cloud: Google Cloud Platform, AWS
- Collaboration: Notion, Discord, Git, Bash, Google Workspace

#### **SOFT SKILLS:**

• Project Management, Problem Solving, Communication and Writing Skills (English & Filipino), Time Management Skills, Critical and Analytical Thinking, Professionalism, Reliability, Flexibility, Creativity

#### NOTABLE PROJECTS

#### Kinetiq Manufacturing ERP System

January 2025 - Present

GitHub Repository: https://github.com/Kinetig-PLM

- Designed and architected the entire AWS cloud infrastructure, ensuring scalability, security, and efficiency. Implemented AWS Cognito for authentication, AWS WAF & Shield for security, S3 for storage, and RDS (PostgreSQL) for database management.
- Developed and integrated backend APIs using Django (Python), enabling seamless data flow between the application and cloud infrastructure.
- Built the frontend Shell App with React, Tailwind CSS, and JavaScript, focusing on a responsive and user-friendly interface for manufacturing operations.
- Led API and database integration efforts as part of the Integration Team, managing connections between AWS Lambda, API Gateway, CloudFront, and RDS for real-time and efficient data transactions.
- Set up AWS CodePipeline for continuous integration and deployment (CI/CD), ensuring a streamlined and automated software delivery process.
- Implemented AWS KMS (Key Management Service) for data encryption and security compliance.
- **Technology Stack:** AWS (Cognito, WAF, Shield, S3, RDS, Lambda, API Gateway, CloudFront, CodePipeline, KMS), Django (Python), PostgreSQL, React, JavaScript, Tailwind CSS, CSS

## **Document and Receipt Automation System (DRAS)**

November 2024

GitHub Repository: https://github.com/matchi-1/DRAS.git

- Automates document and receipt generation using Google Apps Script and Google Workspace tools (Docs, Sheets, and Forms).
   It streamlines template creation, financial record management, and automated delivery of summaries and receipts to clients and sponsors
- Technology Stack: Google AppScript, JavaScript, GCP, HTML

# CNN Skin Cancer Image Classification

Aug 2024

GitHub Repository: https://github.com/matchi-1/CNN-Skin-Cancer-Image-Classification.git

- A Convolutional Neural Network implemented using TensorFlow Keras to classify skin cancers from dermatological lesions into categories like melanoma and benign using the HAM10000 skin dataset.
- Technology Stack: Python, Pandas, Numpy, Matplotlib, TensorFlow Keras, Jupyter Notebook

Twitter Sentiment Analysis July 2024

GitHub Repository: https://github.com/matchi-1/Twitter-Sentiment-Analysis.git

- Conducted Twitter sentiment analysis using supervised learning in machine learning. It includes Exploratory Data Analysis (EDA), text preprocessing, and the training/testing of machine learning models
- Technology Stack: Python, Pandas, Numpy, Matplotlib, Scikit-learn, Jupyter Notebook

# Airbnb AI Customer Support Aug 2024

GitHub Repository: https://github.com/matchi-1/Airbnb-Al-Customer-Support.git

- An Airbnb AI customer support chatbot powered by Google's LLM, Gemini 1.5 Pro, coded in Node.js and React, and utilized
  Firebase for the database. It provides personalized replies to concerns and FAQs, markdown-formatted responses, multilanguage support, and feedback mechanism.
- Technology Stack: Node.js, React, Firebase, JavaScript, Material UI, HTML, CSS, Gemini

# Full Stack Standalone Java PLM Student Enrollment System

December 2023

GitHub Repository: https://github.com/ matchi-1/PLM-ARES.git

- Developed PLM-ARES (Pamantasan ng Lungsod ng Maynila Academic Records & Enrollment System), a standalone Java
  application using JavaFX and MySQL. Designed to streamline student enrollment with distinct modules for administrators and
  users, it stores historical and academic data. Key features include an automatic class scheduler and enhanced class
  management tools for administrators.
- Technology Stack: Java, JavaFX, MySQL, Relational Database Management System

## AWARDS

AWS Innovation Cup 2024 Philippines

Champion, Project Manager, Backend Developer

September 2024

- Led the development of a prototype Al-driven Emergency Triage and Queueing System for healthcare, named "Agap."
- Architected a serverless infrastructure leveraging AWS services, including Bedrock, S3, RDS, Lambda, and API Gateway, ensuring scalability and efficiency.
- Designed security protocols by configuring AWS Key Management Service (KMS) and AWS Web Application Firewall (WAF) to safeguard sensitive data.
- Developed a chatbot feature utilizing Bedrock's Foundational Model, Anthropic's "Claude Sonnet"
- Created the wireframe for the user interface and collaborated on the design and refinement of additional modules.
- Formulated the business model and projected usage costs for the application.
- Successfully managed the project as the lead and pitched the concept to InnoCup judges.

## DOST.imake.wemake Microcomputers/Microcontrollers Innovation Competition

**Philippines** 

Top 10 Finalist, Project Manager, Software & Hardware Developer

September 2022

- Engineered ROBIN: Recyclables-Obtaining Bin Machine for Instant Exchangeable Network Points using Raspberry Pi 4. ROBIN is an automated bin for segregating waste and rewarding mobile data load to users based on waste type and weight.
- Managed a team of four (4) while co-developing and designing software and hardware requirements.
- Led the presentation to potential partners such as Department of Sanitation and Cleanup Works of Quezon City (DSQC), Department of Public Services (DPS)- Manila, Globe, and DOST for the future deployment of the ROBIN.
- Developed software for waste identification through the integration and coordination of all sensors with a smart fraud detection system

Singapore AsianInvent Singapore

Silver Medal, Project Manager & Lead Presenter

May 2020

- Created GolDig: An Automated Robot Machinery Collecting Golden Apple Snails on Rice Fields
- Led the team to construct robotic hardware while integrating software for automatic navigation and sample collection

# ADDITIONAL STUDY

DataCamp Manila, PH

Machine Learning and Data Science Course Works

June 2023 – Present

- Developed proficiency in key tools and libraries including NumPy, Pandas, SciPy, and Matplotlib, alongside foundational statistics for data science.
- Gained expertise in data analysis and data engineering workflows.
- Mastered supervised and unsupervised learning techniques with Scikit-Learn, addressing classification, regression, and clustering problems.
- Explored deep learning frameworks and libraries such as PyTorch, TensorFlow, and Keras.
- Completed guided and independent projects, including classification tasks and analysis of audio, numeric, and image datasets.

Harvard University Manila, PH

CS50x Introduction to Computer Science

March 2022 - April 2023

- Successfully completed all nine problem sets, tackling programming challenges in C (e.g., recovering deleted image files, implementing image filtering algorithms), SQL (e.g., querying and analyzing city interaction databases), and Python (e.g., predicting FIFA match outcomes using historical data).
- Designed and developed a fully functional custom website as the final project, ensuring it met specified technical and design requirements.
- Gained hands-on experience in web development, data structures and algorithms, database management (SQL, Python), data cleaning and website hosting.

### SCHOLARSHIPS

DataCamp Donates Scholar November 2023

Advanced Energy Child-Of-Employee STEM Courses Scholarship Grant

June 2023

Department of Science and Technology - Science Education Institute (DOST-SEI) Merit Scholar

June 2022