

PROFILE <https://sweep-portfolio.vercel.app>

Aspiring Software developer with hands-on experience in building web and mobile applications using Next.js, Django, Node.js, Supabase, and Angular. Additionally skilled in data analysis and visualization using Python, R, SQL, and Power BI. Strong foundation in Data Science with experience in developing Machine Learning Architectures, Policy Optimization Frameworks, and Language Models

EDUCATION

UNIVERSITY OF SAN CARLOS	Cebu City, Cebu
Bachelor of Science, Major in Computer Science (GWA 1.53)	Expected Jan, 2026
Dean’s Lister (2023 & 2024)	

Relevant Coursework: Data Structures and Algorithms, Algorithms and Complexity, Software Engineering, Systems Analysis and Design,Web Development, Object-Oriented Programming, Application Development.

TECHNICAL SKILLS

Programming:	C, C++, JavaScript, Typescript, Python, Java, PHP
Web Development:	HTML, CSS, TailwindCSS, C#, DOTnet, ReactJS, NextJS, Node, Express, Laravel, Angular
Design and Prototyping:	Figma, Lucidchart
Databases:	SQL, MySQL, PostgreSQL, Appwrite, MongoDB
Collaboration:	Microsoft Teams, Jira, Quicksight
Soft Skills:	Problem-solving, Attention to Details, Communication, Leadership, Teamwork and Collaboration, Time Management, Project Management, Continuous Learning

EXPERIENCE

GABTECH - Data Analyst / Research Analyst (Contract)	Remote · Jan - Apr 2025
--	-------------------------

- Engineered end-to-end ETL pipelines for ingesting and transforming multi-source business data across departments.
- Conducted advanced exploratory data analysis (EDA) and developed machine learning prototypes.
- Collaborate cross-functionally with product and engineering teams

TALLECO JOB TARGET - Data Scientist Intern (Internship)	Remote · Aug - Nov 2024
---	-------------------------

- Trained in industry level database management skills, to maintain, analyze, and organize large datasets efficiently, communicated key insights to technical and non-technical stakeholders, and collaborated with a Data Scientists
- Applied statistical analysis and advanced statistical methods using R and Python to extract insights and communicate through data visualization
- Provided comprehensive data report and design through PostgreSQL using PowerBi, Amazon Quicksight, and Amazon Athena.

QUADX - Data Analyst (Contract)	Remote · Jun - Sep 2023
---------------------------------	-------------------------

- Developed and implemented statistical models using R and Python to analyze & optimize business operations
- Utilized predictive modeling techniques to forecast key business metrics
- Designed and maintained data pipelines to ensure reliability of data-driven solutions

CERTIFICATIONS

Software Engineer Certification	Aug 2025
- Demonstrated proficiency in software engineering fundamentals through real-world coding challenges. Assessed on problem-solving, data structures, algorithms, and code optimization in a timed environment.	

Understanding Typescript	Jan 2025
- Completed an in-depth TypeScript course covering core concepts (types, interfaces, generics), advanced features (decorators, mapped types), and integration with React, Node.js, and Webpack.	

JavaScript Algorithms and Data Structures by freeCodeCamp	Aug 2024
- Earned certification by mastering JavaScript fundamentals, ES6 features, and solving algorithmic challenges. Developed skills in OOP, functional programming, data structures, and debugging through hands-on projects. View certificate.	

CyberOps Associate	Sep 2023
- A certification that gave me practical experience with a CCNA course focusing on advanced switching technologies, LAN/WLAN security, and troubleshooting VLANs, redundancy, and Cisco Packet Tracer.	

Back End Development and APIs by freeCodeCamp	Sep 2024
- Developed server-side applications using Node.js, Express, and MongoDB. Built RESTful APIs, managed dependencies with npm, and implemented database operations with Mongoose.	

Oracle Certified Expert, Java EE 6 Web Component Developer	Jan 2024
- Achieved certification demonstrating advanced skills in developing web-based applications using Java EE 6 technologies. Covered servlets, JSP, web application security, session management, annotations, and deployment in enterprise environments.	

THESIS

Enhancing Cebuano Constituency Parsing: A Stemmer and Syntax Tree Optimization Approach	Jan - Nov 2024
DOI: 10.1109/ICCA65395.2025.11011162 Link	

- Designed and implemented a rule-based constituency parser optimized for the Cebuano language based on the CKY parsing strategy and Chomsky Normal Form (CNF).
- Leveraged binary constituent labeling, grammar induction, and a bracketing normalization scheme to support the accurate derivation of hierarchical phrase structure trees in a low-resource language context.
- The study highlights the efficacy of hybrid symbolic-NLP pipelines in enhancing syntactic parsing quality for under-resourced Philippine languages.

PROJECTS

Cinemascape – Full-Stack Movie Management Platform

- Developed a responsive movie management platform allowing users to perform full CRUD operations on movie entries, including media uploads and updates.
- **Backend:** Built with Django and Django REST Framework, integrated with Cloudinary for media storage and PostgreSQL for structured data management.
 - **Frontend:** Developed with Angular, styled using modern UI practices to ensure seamless user experience and responsiveness.
 - **Features:** User-friendly movie listing, editing, and deletion with real-time feedback and media previews.
 - [Repository](#)

PMS – Patient Management System (PMS)

- Developed a healthcare appointment management platform enabling patients to register, book appointments, and receive SMS confirmations.
- **Frontend:** Developed with Next.js 14 and TypeScript, styled using Tailwind CSS and ShadCN for a fully responsive and accessible UI.
 - **Backend:** Integrated Appwrite for database, auth, file storage, and Twilio for automated SMS notifications.
 - **Features:** Patient and admin dashboards, appointment scheduling/cancellation, file uploads, and performance monitoring via Sentry.
 - [Repository](#)

Tasky - To Do List Mobile Application

- Co-developed a cross-platform task management app with real-time CRUD operations, enabling users to manage tasks
- **Frontend:** Built with React Native and TypeScript, styled using NativeWind (Tailwind CSS) for a responsive and clean mobile UI.
 - **Backend:** Integrated Supabase for authentication, real-time database syncing, persistent task storage, and deployed as a signed APK using Expo.
 - **Features:** Tab-based navigation for tasks, modals for creation/editing, and icon-based actions for intuitive task handling.
 - [Repository](#)

MAPPO – Multi-Agent Proximal Policy Optimization Framework

- Implemented and extended a reinforcement learning framework for cooperative multi-agent environments for Discrete Structures III Subject
- **Core Functions:** Developed in Python with PyTorch, TensorFlow, and Seaborn for visualization. Built under a modular onpolicy architecture supporting both on-policy and off-policy variants.
 - **Environments Supported:** StarCraft II (SMAC & SMACv2), Hanabi, Multi-agent Particle Environments (MPE), and Google Research Football (GRF).
 - **Features:** Shared policy architecture, custom environment wrappers, configurable hyperparameters, and training/evaluation scripts for reproducibility.
 - **Notable Contribution:** Added support for SMAC V2 and optimized training workflows for more stable cooperative policy learning.
 - [Repository](#)

TCM – Toxic Comment Classification Model

- Rebuilt a machine learning model with the help of EMNLP 2021 paper to classify toxic online comments using NLP techniques and labeled dataset analysis.
- **Modeling:** Implemented using Python with Scikit-learn, NLTK, and XGBoost for preprocessing, feature extraction (TF-IDF), and classification.
 - **Workflow:** Included data cleaning, text normalization, tokenization, and hyperparameter tuning for improved accuracy.
 - **Evaluation:** Assessed using metrics such as accuracy, precision, recall, and confusion matrix.
 - [Repository](#)

LEADERSHIP & ACTIVITIES

Computer Information Sciences Council Ambassador	Sep 2024 - Jun 2025
<ul style="list-style-type: none">- Responsible for representing block concerns in the university’s and department’s endeavors, promoting department projects, and communicating executive announcements.	
Google Developer Student Clubs USC Noogler Member	Sep 2021 - Aug 2023
<ul style="list-style-type: none">- Participated in Google Developer Student Clubs at USC by engaging in technical workshops and community activities	
Red Cross Youth Council Secretary & Records	Jun 2019 - Apr 2021
<ul style="list-style-type: none">- Managed financial records and budget tracking for upcoming events and planning initiatives. Also served as a volunteer in major events held in Cebu	

REFERENCES

Mr. Gerard D. Ompad
Senior Principal Data Scientist - DTN MeteoGroup
Part-Time Faculty, Data Analytics & Intelligent Systems - University of San Carlos
Phone: +63 923 827 1487
Email: ztd256@sund.ku.dk

Mr. Kyne Edric B. Sia
Software Developer - Pert Inc.
Thesis Partner - University of San Carlos
Phone: +63 991 591 3036
Email: siakynedricb@gmail.com