

# **PROFILE**

Motivated 4th year BS in Computer Science student with hands-on experience in back-end development, data-driven research, and mobile app development. Skilled in Java, Python, TypeScript, and Supabase, with a strong foundation in algorithms and project management. Recognized for academic excellence and active participation in tech communities.

## CONTACT

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# **HEINRICH C. SANDRINO**

# **BS IN COMPUTER SCIENCE**

## **EDUCATION**

# Bachelor of Science in Computer Science - BSCS

Bicol University College of Science 2025

Dean's List Award – 2<sup>nd</sup> Semester A.Y. 2021-2022

Dean's List and President's List Award – 1st Semester A.Y. 2022-2023

Service Award - A.Y. 2022-2023

Dean's List Award – 2<sup>nd</sup> Semester A.Y. 2023-2024 President's List Award – 1st Semester A.Y. 2024-2025 Dean's List Award – 2<sup>nd</sup> Semester A.Y. 2024-2025

## **CERTIFICATIONS**

### **Civil Service Professional Eligibility**

Career Service Professional Examination

Passed: August 2023

Issued by: Civil Service Commission (CSC)

# Java Programming: Solving Problems with Software

Coursera April 3, 2023

Built Java programs using real-world data; practiced debugging, algorithm design, and object-oriented principles. Final project analyzed U.S. baby name trends using CSV files.

### **SKILLS AND COMPETENCIES**

- Software Tools: Excel, PowerPoint, Word, VS Code, Lightroom, OBS Studio, Android Studio, R Studio, Google Colab, FlutterFlow, GitHub
- Backend Platforms: Supabase, Firebase
- Web & Frameworks: JavaScript, TypeScript, Angular
- APIs: Mapbox API, Google API
- Programming Languages: C, C++, Python, Java, HTML, R, Dart, Javascript, Typescript

# **RESEARCH AND PROJECTS**

# LAKAW: Smart Travel Planner with Route Optimization and Itinerary Generator for Tourists in Albay

May 2025

Developed LAKAW, a mobile travel app for Albay integrating real-time route optimization and itinerary generation using hybrid algorithms (Floyd–Warshall, A\*, Genetic) to enhance tourism planning and user experience.

# **Weather-Based Climate Vulnerability Index using K-Means Clustering** May 2024

Developed a data-driven Climate Vulnerability Index using K-Means clustering on global weather data to identify and classify regions at risk from climate change for informed resilience planning.

# Bicol Dessert Recipe Recommendation Based on Ingredients Detection Using Image Processing

May 2024

Developed a mobile app that uses image processing and AI to recommend traditional Bicol dessert recipes based on detected ingredients.

## **INTERNSHIPS AND WORK EXPERIENCES**

### **DESO Technical Support Staff**

Commission on Elections May 2025

Provided technical assistance for Automatic Counting Machines (ACMs) during the 2025 National and Local Elections. Responsibilities included setup, troubleshooting, and coordination with electoral boards to ensure smooth election operations.

### **Back-End Support Staff**

Fornix Corporation January 2024 – July 2024

Developed and implemented internal product codes for data migration within the Odoo ERP system. Utilized spreadsheets to ensure accurate management and analysis of project data.

### **Back-End Developer**

Quanby Solutions Inc. June 2024 – July 2024

Contributed to the development of an HR system using the Angular framework (TypeScript) with Supabase as the back-end service. Applied Scrum methodology throughout the project lifecycle during internship.

#### SEMINARS AND CONFERENCES ATTENDED

### Philippine Online Freelancing Conference 2024

September 2024 The Oriental Hotel

### DEVCON Legazpi: Game Development Industry Roadshow 2024

April 2024

Legazpi Convention Center

### **Bicol Blockchain Conference 2023**

November 2023 Bicol University

# Campus DEVCON Legazpi: A Student Tech Symposium

October 2023 Bicol University

### Get Your Git Together: Learning Git and GitHub

May 2023 Bicol University

### Learning the Fundamentals: Key to Effective Project Management

May 2023 Bicol University