

HEINRICH C. SANDRINO

SOFTWARE DEVELOPER

+63-966-986-6624 | heinrichsandrino@gmail.com | LinkedIn: www.linkedin.com/in/hcsandrino

Portfolio: https://heinrichsandrino.github.io/Sandrino_Portfolio/

PROFESSIONAL SUMMARY

Software Developer with a strong focus on back-end development and system architecture. A Computer Science graduate from Bicol University with practical experience in building real-world systems and applications using Java, Python, TypeScript, Dart, and Supabase. Contributed to academic and internship projects involving AI-enhanced mobile platforms, backend logic, and API integration. Equipped with a solid foundation in algorithms, clean code practices, and database systems. Demonstrates strong analytical thinking, a collaborative work ethic, and a commitment to developing scalable, meaningful software in dynamic, innovation-driven teams.

KEY SKILLS

- | | | | |
|--------------|--------------------|------------|--------------|
| ✓ C | ✓ Dart | ✓ React | ✓ MySQL |
| ✓ C++ | ✓ HTML | ✓ Three.js | ✓ PostgreSQL |
| ✓ Python | ✓ R | ✓ GSAP | ✓ Mapbox API |
| ✓ Java | ✓ Spring Boot | ✓ REST API | ✓ Google API |
| ✓ JavaScript | ✓ Spring Framework | ✓ Supabase | ✓ Git/GitHub |
| ✓ TypeScript | ✓ Angular | ✓ Firebase | |

WORK EXPERIENCE

DESO Technical Support Staff | Commission on Elections (COMELEC)

May 2025

- Deployed, configured, and tested 4 Automated Counting Machines (ACMs), each assigned to over 800 registered voters during the 2025 national and local elections
- Resolved live technical malfunctions under high-pressure conditions to ensure accurate and uninterrupted voting operations
- Coordinated with electoral board officials to maintain protocol compliance and secure data transmission of election results

Back-End Developer Intern | Quanby Solutions Inc.

Jun 2024 – Jul 2024

- Developed back-end features including authentication, data handling, and business logic using Supabase and TypeScript, supporting integration with Angular frontend
- Managed the team's GitHub repository, handling merges across 11 developers and enforcing version control standards
- Collaborated with cross-functional teams to maintain system integrity and deliver consistent data flow across application layers

IT Support Intern (DOLE-GIP Program) | DOLE

Apr 2024 – Jul 2024

- Digitized and organized barangay records into a structured digital filing system to enhance data accessibility
- Diagnosed and maintained office hardware including printers and workstations, contributing to stable daily operations
- Reformatted official documents and reports, improving visual presentation and document processing workflows

Back-End Support Staff | Fornix Corporation

Jan 2024 – Jul 2024

- Implemented internal product codes supporting the migration of over 1,000 inventory entries into the Odoo ERP system
- Organized and validated complex data sheets to ensure clean, accurate data transfer during system updates

PROJECTS

Spring Boot Employee Management System

Jul 2025

- Built a complete CRUD web application using Java, Spring Boot, MySQL, and REST APIs to manage employee data.
- Designed a clean, modern HTML/CSS/JavaScript frontend integrated with backend services via API calls.

LAKAW: Smart Travel Planner with Route Optimization and Itinerary Generation

May 2025

- Created a mobile tourism application for Albay using Flutter with algorithmic logic implemented in Dart
- Integrated Floyd–Warshall, A*, and Genetic Algorithms for intelligent route computation and itinerary planning
- Connected frontend to Supabase and Mapbox API for real-time data handling and geolocation-based recommendations

Climate Vulnerability Index using K-Means Clustering

May 2024

- Developed a data clustering model using R to categorize global regions based on climate vulnerability
- Applied K-Means Clustering to analyze weather datasets and visualized high-risk geographic clusters for planning use

aiBites: Bicol Dessert Recipe Recommendation App using Image Processing

May 2024

- Built a mobile application using Java and Android Studio to identify dessert ingredients via image input
- Integrated image processing and Optical Character Recognition (OCR) to suggest relevant recipes based on detected components

LEADERSHIP & VOLUNTEERISM

Vice President for Communications | DEVCON Philippines – Legazpi Chapter

Sept 2024 – Apr 2025

Led the drafting of official proposals, coordinated event communications, and ensured consistent digital messaging across platforms. Contributed to the planning and execution of chapter activities while facilitating speaker engagement and community outreach initiatives.

Chapter Lead & Climate Campaigner | Angat GenC – Albay Chapter

Nov 2022 – Jul 2025

Managed the coordination of climate awareness campaigns, proposal writing, and training programs. Collaborated with fellow campaigners to execute educational activities, mobilize youth volunteers, and establish partnerships with local stakeholders to amplify advocacy impact.

Deputy Director for Technical and Productions | Bicol University UNESCO Club

Aug 2022 – May 2023

Oversaw technical logistics for university events, including equipment setup, sound system management, and program flow monitoring. Ensured smooth execution of presentations and implemented quick resolutions to technical issues during live activities.

SEMINARS & CONFERENCES ATTENDED

- Philippine Online Freelancing Conference 2024 – *The Oriental Hotel, Sep 2024*
- DEVCON Legazpi: Game Development Industry Roadshow – *Legazpi Convention Center, Apr 2024*
- Bicol Blockchain Conference 2023 – *Bicol University, Nov 2023*
- Campus DEVCON Legazpi: A Student Tech Symposium – *Bicol University, Oct 2023*
- Get Your Git Together: Learning Git and GitHub – *Bicol University, May 2023*
- Learning the Fundamentals: Key to Effective Project Management – *Bicol University, May 2023*

EDUCATION & CERTIFICATIONS

BACHELOR'S DEGREE | BS in Computer Science | Bicol University | Cum Laude

2021 – 2025

SECONDARY EDUCATION | STEM Academic Track | Bicol Regional Science High School | With High Honors

2015 – 2021

CERTIFICATION | Civil Service Professional Eligibility | Issued by Civil Service Commission | Passed: August 2023

2023