

HEINRICH C. SANDRINO

SOFTWARE DEVELOPER

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

PROFESSIONAL SUMMARY

Software Developer with a strong focus on back-end development. A Computer Science graduate from Bicol University with hands-on experience in building real-world systems using Java, Python, TypeScript, Dart, and Supabase. Through internships and project work, I've contributed on applications and mobile platforms that include AI-powered functionality. Backed by a solid foundation in algorithms and clean code practices, I bring strong problem-solving skills, a thoughtful approach to system design, and a collaborative mindset to every project. I'm now seeking an opportunity to contribute to building reliable and meaningful software within a team that values innovation and shared growth.

KEY SKILLS

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|--------------|--------------------|------------|--------------|
| ✓ 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 serving over 800+ registered voters, for 2025 national and local elections
- Resolved real-time technical issues and machine malfunctions under high-pressure conditions, ensuring continuous and accurate voting operations
- Coordinated closely with electoral board officials to uphold compliance with voting protocols and secure transmission of election results

Back-End Developer Intern | Quanby Solutions Inc.

Jun 2024 – Jul 2024

- Developed and integrated backend features such as login, data handling, and business logic using Supabase and TypeScript, ensuring smooth interaction with the Angular frontend
- Solely managed the team's GitHub repository, overseeing code merges from 11 developers across back-end, front-end, and UI/UX teams, and enforcing clean version control practices
- Collaborated across teams to ensure proper data flow and system performance, contributing to a cohesive and maintainable project architecture

IT Support Intern (DOLE-GIP Program) | DOLE

Apr 2024 – Jul 2024

- Digitized and organized physical barangay records into a digital filing system to improve data accessibility and long-term record management
- Diagnosed and repaired common issues in office hardware, including printers and workstations, ensuring smooth day-to-day operations
- Supported administrative tasks by formatting official documents and enhancing report layouts to improve clarity and presentation

Back-End Support Staff | Fornix Corporation

Jan 2024 – Jul 2024

- Implemented product codes supporting the migration of over 1,000+ entries into the Odoo ERP system for internal inventory and data tracking
- Managed, organized, and validated large project data sheets, ensuring clean data transfer and minimizing migration errors

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

- Built a mobile tourism app for Albay using Flutter, with algorithms implemented in Dart Programming Language
- Integrated Floyd–Warshall, A*, and Genetic algorithms for optimized route and itinerary generation
- Connected frontend to Supabase and Mapbox API for real-time data and location-based recommendations

Climate Vulnerability Index using K-Means Clustering

May 2024

- Developed a clustering model to classify global regions by climate vulnerability using R programming
- Applied K-Means Clustering on weather data to group high-risk zones
- Created visual outputs to assist in environmental planning and decision-making

aiBites: Bicol Dessert Recipe Recommendation App using Image Processing

May 2024

- Built an Android app in Java using Android Studio for ingredient detection via image input
- Applied image processing and OCR (Optical Character Recognition) to identify ingredients and match them with dessert recipes

LEADERSHIP & VOLUNTEERISM

Vice President for Communications | DEVCON Philippines – Legazpi Chapter

Sept 2024 - Apr 2025

As VP for Communications, I was responsible for drafting official proposals, coordinating event communications, and ensuring consistent messaging across digital platforms. I actively contributed to event planning and execution, engaged with speakers and participants, and supported outreach efforts to grow community involvement.

Chapter Lead & Climate Campaigner | Angat GenC – Albay Chapter

Nov 2022 - Jul 2025

As Chapter Lead and Lead Campaigner for Angat GenC in Albay, I am responsible for coordinating community outreach campaigns, writing proposals for events and training sessions. I actively collaborate with fellow campaigners to plan and execute educational activities, mobilize youth volunteers, and foster partnerships with local stakeholders. Through this role, I've developed strong leadership, advocacy communication, and event coordination skills.

Deputy Director for Technical and Productions | Bicol University UNESCO Club

Aug 2022 - May 2023

Handled all technical needs during events, including checking equipment, sound systems, and program flow. Made sure presentations ran smoothly with little to no errors. Stepped in quickly when issues came up to keep the event running well for all participants.

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