Johnstheward S. Alvarado

Computer Engineering · Networking · Embedded Systems · IoT

Davao City, Philippines · Open to work anywhere

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PROFILE

Computer Engineering student with hands-on experience in cell site installation, Wi-Fi and CCTV setup, and hardware troubleshooting. Completed Smart Communications' Wireless Engineering Education Program (SWEEP) in 2026, assisting engineers with cell site installation. Follows procedures closely, works safely on site and explains technical detail clearly to non-technical people. Uses Claude Code, an AI coding assistant, to help write and debug code, document work and build web pages.

EXPERIENCE

Wireless Engineering Trainee

2026

Smart Communications, Inc. · Smart Wireless Engineering Education Program (SWEEP) · Davao, Philippines

- Assisted engineers with cell site installation, connecting and terminating feeder and grounding cables on outdoor radio units while following site safety protocols.
- Recorded and analyzed network performance data in Excel, Ookla Insights and CellMapper to support network monitoring.
- Checked rack and board status in network equipment management software to confirm hardware was active and running normally.
- Built HTML pages and AI prompts that made the team's internal documentation faster to produce and easier to use.
- Completed the program and received a Certificate of Completion from Smart Communications.

Network and CCTV Technician

2024

Anawim Elementary School, Inc. · Davao City, Philippines

- Installed and configured wired Wi-Fi access points to give the school reliable connectivity for daily operations.
- Installed CCTV cameras across the campus and handled basic troubleshooting when problems came up.
- Gave on-site technical support to teachers and staff.

Data Entry and Sales Inventory Clerk

2023

Various assignments · Davao City, Philippines

- Kept digital records and inventory data accurate and up to date in Microsoft Excel.
- Supported sales operations with inventory tracking and administrative coordination.
- Often handled several tasks at once while keeping records accurate.

PROJECTS

FLOATech: Arduino-Based Floating Unit for Tilapia Farms

2026

Design project, four-person team · Holy Cross of Davao College

- Solar-powered floating unit that monitors water parameters in real time, feeds fish on schedule and runs aeration for Nile tilapia (*Oreochromis niloticus*) ponds.
- Arduino control with custom-soldered circuit boards, voltage regulators, LCD and keypad in weatherproof enclosures.
- Off-grid power from a solar panel, charge controller and battery, mounted on a pontoon frame of buoyant barrels.
- Microbubble diffuser for aeration and a GSM module.
- Built and tested on a real pond. Second Runner Up, Best Design Project Exhibit, TechnoFair 2026; 2nd Best Research Poster, CET Research Conference 2026.

Other builds: function generator · mono amplifier with speaker · four-legged walking cobot · personal website (jsalvarado.github.io), built with HTML, CSS, JavaScript and Claude Code

SKILLS

Networking and field work: Wi-Fi access point installation and setup, cell site installation support, cable connection and termination, CCTV installation, network performance monitoring, basic networking, site safety procedures (OSH)

Hardware and embedded: hardware troubleshooting, microcontroller and embedded development, sensors and automation, solar power systems

Software and tools: Claude Code (AI-assisted development), HTML, CSS and JavaScript, Microsoft Excel, Ookla Insights, CellMapper, AI prompting for documentation

Working with people: on-site support for non-technical staff, clear technical explanations, accurate data entry and records, teamwork under deadlines

EDUCATION

BS Computer Engineering, Holy Cross of Davao College 2023 to present

Previously enrolled in BS Electronics and Communications Engineering, 2022 to 2023

Junior and Senior High School, Davao City National High School 2016 to 2022

Junior High 2016 to 2020 · Senior High 2020 to 2022

Elementary, Anawim Elementary School Batch 2016

AWARDS

- **Champion**, Networking Competition, 2025
- **Second Runner Up**, Best Design Project Exhibit, TechnoFair 2026 (FLOATech), Holy Cross of Davao College
- **2nd Best Research Poster**, CET Research Conference, Conversazione 2026 (FLOATech), Holy Cross of Davao College

TRAINING AND MEMBERSHIPS

- Certificate of Completion, Smart Wireless Engineering Education Program (SWEEP), 2026
- Occupational Safety and Health Orientation
- Basic Computer Networking Workshop
- Programming workshops
- Member, Institute of Computer Engineers of the Philippines (ICpEP)
- Participant, 16th CODEE Region XI Engineering Congress