

Bachelor of Science in Electronics Engineering

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https://tobiassidgallen.github.io/portfolio/

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Sunny Brooke 2, Brgy. San Francisco, General Trias, Cavite



PROFESSIONAL SUMMARY

Electronics Engineering graduate with hands-on experience in embedded systems and web development. Proficient in multiple programming languages and hardware platforms with demonstrated ability to deliver real-world solutions. Seeking to leverage technical expertise and problem-solving skills in a dynamic tech environment.

TECHNICAL SKILLS

- Programming Languages: Python, JavaScript, C, C++, HTML, CSS, VHDL
- Hardware & Embedded Systems: Arduino Uno, Raspberry Pi, Microcontroller Programming, Microprocessor System Design, Digital IC Design
- **Electronics Design:** Circuit Analysis and Design, PCB Design and Layout, Analog and Digital IC Design, Electronic Device Characterization
- Communication Systems: RF/Wireless Communication, Antenna Design, Data Communication Protocols, Modulation and Coding Techniques
- Digital Systems: Digital Logic Design, FPGA Programming, Computer Architecture, Signal Processing
- Control Systems: Feedback Control Systems, PID Controller Implementation, Automated System Design
- Operating Systems: Linux (Arch Linux), Windows
- IT Fundamentals: Hardware Troubleshooting, System Diagnostics, Network Configuration, Operating System Installation and Maintenance, Computer Assembly and Repair
- Web Development: JavaScript, Responsive Design, Full-Stack Development
- Engineering Tools: Arduino IDE, Neovim, Oscilloscope, Logic Analyzer, Multimeter, MATLAB/Simulink, CAD Software, Circuit Simulation Tools

PROFESSIONAL EXPERIENCE

Electronics Support Intern

Pro Board Technology Services (PBTS) Corporation | Carmona, Cavite July 2023 - August 2023 (240 hours - OJT)

- Completed comprehensive On-The-Job Training as part of academic curriculum
- Gained hands-on experience in electronics support and technical troubleshooting
- Applied theoretical knowledge in real-world industrial environment
- Developed professional work ethics and industry best practices

PROJECTS

Reverse Vending Machine for PET Plastic Bottles | Capstone Project

Project Documentation

- Designed and implemented embedded system using Arduino Uno and Raspberry Pi integration
- Programmed motor control systems and sensor interfaces for automated bottle processing
- Developed WiFi access reward system for sustainable technology solution
- Successfully demonstrated proof-of-concept and delivered functional prototype within academic timeline
- Collaborated effectively in multidisciplinary team environment Professional Web Development Projects
- Developed and deployed professional websites for real businesses using HTML, CSS, and JavaScript
- MJK Iron Works <u>Phttps://mjkironworks.site/</u> Built custom web solution for industrial services company
- Mabuhay Power & Diesel Generator Services <u>https://tobiassidgallen.github.io/mabuhay-power/</u> - Created responsive business website currently in active use
- Demonstrated ability to translate client requirements into functional web applications

EDUCATION

Bachelor of Science in Electronics Engineering Emilio Aguinaldo College - Cavite, Dasmariñas, Cavite August 2020 - May 2024 Dean's Lister (2022-2024) | GPA: 1.70/5.00 Relevant Coursework:

- Digital Systems: Digital Electronics, Microprocessor/Microcontroller System Design, Digital IC Design
- Communication Systems: Principles of Communication, Modulation & Coding Techniques, Data Communication, Antenna System Design
- Electronics Design: Electronic Devices & Circuits, Circuit Analysis & Design, Analog IC Design, Signal Processing
- Control Systems: Feedback and Control Systems, Advanced Engineering Mathematics
- **Programming:** Computer Programming, Engineering Data Analysis
- Hardware Design: Electromagnetics, Materials Science, Computer-Aided Drafting