

# Sid Gallen E. Tobias

Bachelor of Science in Electronics Engineering

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🌐 <https://tobiassidgallen.github.io/portfolio/>

🖱 <https://github.com/tobiassidgallen>

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



## PROFESSIONAL SUMMARY

Electronics Engineering graduate with a strong desire to work in embedded systems development and information technology. Proficient in multiple programming languages and hardware platforms with demonstrated ability to deliver real-world solutions. Passionate about microcontroller programming, system security, network infrastructure, and 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, Modern User Interface Design
- **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 connectivity and 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  <https://mjkironworks.site/> - Built custom web solution for industrial services company
  - Mabuhay Power & Diesel Generator Services  <https://tobiassidgallen.github.io/mabuhay-power/> - Created responsive business website currently in active use
  - Demonstrated ability to translate client requirements into functional web applications
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## 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