

Genesis Tyndall

Seattle, WA | GenMatcha.com | LinkedIn: linkedin.com/in/gentyn

Summary

Computer Engineer with a strong foundation in hardware verification, avionics systems, and embedded software development. Experienced in writing and maintaining system requirements, developing automated test procedures, and collaborating across teams to ensure functional and regulatory compliance. Skilled in Python, C, VHDL, and test scripting for complex electronic systems. Seeking to bring my systems-level understanding and verification expertise to Apple's hardware engineering team.

Experience

Avionics Electronic Systems Design Engineer

Boeing Commercial Airplanes - Seattle, WA | 2022 – 2024

- Served as subject matter expert for 1,250+ system requirements across 777X and 787 aircraft platforms, focusing on crew alerting and display systems.
- Developed and ran hundreds of semi-automated regression and verification test cases per software package using custom scripting tools.
- Managed logic for 4,900+ crew alerting messages; coordinated with cross-functional teams to ensure full integration and test coverage.
- Collaborated with suppliers to resolve software issues and implement late-stage changes in embedded systems.
- Defined and validated requirements for a new frontend tool interfacing with a multi-model crew alerting logic database, incorporating feedback from five engineering teams.

Assistant Information Management Specialist

Wisconsin Department of Natural Resources - Madison, WI | 2021

- Optimized internal PowerShell scripts, automating workflows and saving hundreds of labor hours.
- Maintained documentation and trained teams, improving software deployment and access control procedures.

Makerspace Officer

The Prototyping Club at UWM - Milwaukee, WI | 2018 – 2022

- Led CAD and maker skill workshops; managed tools, budget, and club development activities.

Projects & Open Source Contributions

- Generative Art Installation (2022): Developed an interactive digital art display using P5.js, integrating algorithmic animation and user-driven parameter adjustments.
- Course Selection Website (2019): Built a Django-based course scheduling tool with a MySQL backend and responsive frontend (HTML, CSS, JavaScript).
- GitHub Contributions: Contributed to open-source keyboard firmware projects

Education

Bachelor of Science in Computer Engineering

University of Wisconsin Milwaukee - Milwaukee, WI | Graduated 2022

Technical Skills

- Programming Languages: Python, C, C++, Java, JavaScript, HTML, CSS, VHDL, Verilog
- Frameworks & Tools: CI/CD, Embedded Linux, Test Automation, Agile Scrum, Git, GitHub, Jira, RQM, Quartus Prime, Django, PowerShell, Bash, Unix
- Industry Knowledge: System Integration, Test Automation, Hardware Verification, Embedded Systems, Digital Logic, Avionics, Crew Alerting Systems, Requirements Engineering