GODWIN PAMMICHUKWU 'PAMMI' EMEFIELE

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Systems engineer at The Boeing Company with hands-on experience in Model-Based Systems Engineering, Safety Critical Function Thread Analysis (SCFTA), and Failure Modes & Effects Testing (FMET) on the T-7A and F-15 — identifying failure pathways, closing airworthiness gaps, and verifying requirements. Background in embedded hardware, firmware, and software; pursuing an M.S. in Artificial Intelligence at Johns Hopkins. Security clearance in process.

EDUCATION

Johns Hopkins University - Whiting School of Engineering — **Baltimore, Maryland**
Master of Science, Engineering for Professionals Program in Artificial Intelligence — *August 2026 - Present*

University of Southern California (USC) - Viterbi School of Engineering — **Los Angeles, California**
Bachelor of Science, Electrical & Computer Engineering (Computer Engineering Emphasis) — *August 2021 - December 2025*
Relevant Coursework: Electromagnetics for engineering systems, Computer Systems Organization, Foundations of Robotics, Embedded Systems Design Lab, Linear Systems, Linear Circuits, Applied Linear Algebra for Engineering, Applied Physics, Calculus I - III

Eton College Boys Boarding School — **Windsor, England**
A Levels: Mathematics, Physics, Economics — *September 2016 - July 2021*

WORK EXPERIENCE

The Boeing Company — **Berkeley, Missouri**
Air Dominance Systems Engineer — *February 2026 - Present*

- Perform Systems Engineering Integration & Test (SEIT) activities on the **T-7A** program, supporting safety-critical analysis and FMET across **25+ system function threads.**
- Independently authored **4+ Safety Critical Function Thread Analyses (SCFTA) from scratch within the first 6 months** on the team, identifying hazardous system interactions and failure pathways ahead of schedule.
- Resolved **critical airworthiness gaps through MIL-STD-882E hazard analysis** and cross-functional coordination, supporting both the **T-7A and F-15** platforms.
- Presented completed SCFTA work to the government **System Program Office (SPO)**, which recognized it as **the most SCFTA progress on the program in 3 years**.

Wilshire Lane Capital — **Los Angeles, California**
Technical & Business Operations Intern — *March 2024 - May 2025*

- Led DealCloud CRM rollout, integrating cross-team workflows and standardizing data-entry processes
- Structured **1,200+** digital records with standardized metadata, making them searchable across teams
- Executed monthly audits of **300+ fixed assets**, applying **standardized tracking protocols** to maintain **100% inventory accuracy**.
- **Surpassed all internship KPIs** through process improvements, earning a **six-month extension beyond the initial term**

PROJECTS

Terra Tech - R&D Initiative (Senior Capstone) — **Los Angeles, California**
Lead Hardware/Electrical Engineer — *January 2024 - May 2024*

- **Engineered a battery-powered sensing platform** integrating capacitive moisture, humidity, and NPK sensors.
- Developed embedded firmware and optimized power management, **extending system efficiency by 35%**.
- Designed and tested **hardware/software interfaces for embedded systems applications.**
- Validated sensor performance through controlled testing, **achieving >90% measurement accuracy**.

Bird Strike Radar - Personal Project — **St. Louis, Missouri**
donpams.github.io/bird-strike-radar — *September 2026 - Present*

- Built a Python pipeline and **Bayesian hierarchical model** rating bird-strike risk at 266 airports per **MIL-STD-882E**.
- Validated on a **2023–25 temporal holdout**; the hierarchical model outperformed a simpler baseline forecast.
- Deployed a **live React map via GitHub Actions**; **automated tests** verify all 3,192 risk levels against the model.

Safe Autopilot - Personal Project — **St. Louis, Missouri**
donpams.github.io/safe-autopilot — *September 2026 - Present*

- Built a **learned flight controller** (Python, JSBSim, Gymnasium, PyTorch) trained to imitate a PID autopilot baseline.
- Added a **runtime safety monitor** with PID fallback; stress tests showed **0% crashes and 2–3× better altitude tracking.**

TECHNICAL SKILLS

Programming: C/C++, Python (PyTorch), MATLAB/Simulink, Verilog, SQL, Bash, Java, JavaScript/React, Git, HTML
Embedded Systems & Hardware: Arduino, Raspberry Pi, PCB prototyping, soldering, I^2C/SPI/UART, GPIO interfacing
Engineering Tools: Model-Based Systems Engineering (MBSE), Oscilloscopes, logic analyzers, digital multimeters, LTSpice, Vivado
Platforms & Software: SysML / Cameo / MagicDraw, Linux/Unix, Git/GitHub, Azure, VirtualBox, VMware