

FRANKLIN YESUTOR, FERGUSON

Mastiff street, GM-046-1558, Madina, Accra
(+233) 055-145-5440 | franklinfergusonofficial@gmail.com

EDUCATION

Kwame Nkrumah University of Science and Technology (KNUST). Aug. 2018 – Sep. 2022
Bachelor of Science (BSc) in Aerospace Engineering
First Class Honours

RESEARCH INTEREST

Unmanned Aerial Vehicles (UAVs) and Autonomous Flight Systems
Human-Robot Interaction and Machine Learning
Computational Fluid Dynamics (CFD)
High-performance Aerodynamics
Electric, Plasma and Hybrid-Electric Propulsion
Space Systems Engineering
Aerospace system design and optimization

TECHNICAL SKILLS

Aerospace & UAV Systems

- Proficient in aerodynamic principles and UAV design (Fixed-wing, multirotor, VTOL)
- UAV configuration and control using Ardupilot, PX4, Mission Planner and QGC
- Drone photogrammetry and image processing for aerial data analysis

CAD & Simulation

- 3D modeling and simulation using SOLIDWORKS, Fusion 360, and Siemens NX

Electronic & Embedded Systems

- Micro-controller programming and integration for autonomous systems
- PCB design with Altium Designer

Programming & Data Analysis

- Programming: Python, (in progress C#)
- Data Analysis and visualization using Excel, Power BI, and SQL

Geospatial Analysis

- Competent in QGIS for spatial data visualization and mapping

ACHIEVEMENTS, GRANTS AND CONTRIBUTIONS

- Google Cybersecurity Certificate (2025) – Foundations in network security, risk management, and incident response
- Academic excellence: Recognized for academic excellence with multiple appearances on the KNUST College of Engineering Provost List (2020, 2021, 2022), demonstrating a consistent commitment to superior performance.
- Ghana Air Force, School of Trade Training Certificate, for having successfully completed a 10-week aircraft practical training programme.
- Scholarship: Ghana Scholarship Secretariat, Brilliant but Needy Student Scholarship.
- Community service: Actively participated in supporting local farmers through significant contributions to the Ghana government's "Planting for Food and Jobs" initiative and fertilizer subsidy program.

RESEARCH EXPERIENCE

Kwame Nkrumah University of Science and Technology (KNUST). 2018 - 2022

Undergraduate Thesis

Supervisor: Dr. (Mrs.) Eunice Akyereko Adjei, Postdoctoral Fellow

Design, fabrication, and testing of an unmanned air vehicle for the acquisition of naval intelligence along Ghana's maritime boundaries

- Designed and built a VTOL UAV optimized for maritime surveillance along Ghana's coastline
- Conducted field test and flight validation to evaluate performance in varying coastal conditions
- Integrated onboard systems for real-time data acquisition and remote monitoring of naval activity

SKT Live Ghana, Westland – Accra, Ghana

Co-Founder; Supervisor: Godfred Addai

Design and integration of a drone-based seed dispersal system for afforestation initiatives

- Designed and fabricated a modular seed dispersal system mounted on a TT Aviation 30L UAV for precision aerial seeding.
- Conducted field experiments to evaluate dispersal efficiency, flight stability, and terrain adaptability.
- Developed autonomous flight plans and seed release protocols for targeted afforestation coverage.
- Applied CAD modeling and 3D fabrication techniques for custom component design and system integration.
- Contributed to operational manuals and technical documentation to support deployment and scaling of the system.

PROFESSIONAL AND WORK EXPERIENCE

Team Lead, Research and Development / UAV Engineer

SKT Live Ghana, Westland Accra.

Nov. 2022 - Present

- Configure, test, and maintain UAVs and support systems for field operations and data collection.
- Diagnose and resolve complex hardware and software issues across drone platforms using advanced troubleshooting techniques.
- Provide technical support and field assistance to clients operating agricultural UAVs, ensuring optimal system performance.
- Deliver hands-on training to drone purchasers on flight operations, safety procedures, and UAV best practices.
- Co-authored technical manuals for drone operations and data analysis tools to support internal training and client onboarding.
- Led 3D modeling and component fabrication initiatives, enhancing the precision and reliability of UAV subsystems.
- Produced operational reports and contributed to documentation for regulatory compliance and stakeholder communication.
- Developed protocols for flight planning, data acquisition, and mission execution to ensure consistency across projects.
- Designed and integrated a modular seed dispersal system with a TT Aviation 30L UAV for afforestation projects.

Drone Instructor (STEM & Outreach) - Ghana Flying Labs at SKT Live

- Facilitated drone education workshops and training sessions for secondary schools to promote STEM engagement.
- Mentored students in drone technology applications, flight safety, and hands-on piloting exercises.
- Delivered outreach programs in institutions such as Faith Montessori and Soronko Academy, inspiring early interest in science and engineering careers.

CFO and COO- Wingxtra Aerospace (UAV start-up)

Feb 2021 - Dec 2023

- Provided strategic leadership in financial planning, cash flow management, and operational oversight for a UAV-focused start-up.
- Supervised daily business operations, including production timelines, logistics, and cross-department coordination.
- Contributed to drone design, prototyping, and testing as part of a multidisciplinary development team.
- Supported business development through budget optimization and alignment of financial goals with engineering timelines.

REFERENCES

Desmond Huvison

Head of UAV / Agric

SKT Live Limited

E-mail: dhuvison@sktlive.com

(+233) 024 754 7777

Felix Appiah

Team Lead – Survey and Mapping

SKT Live Limited

E-mail: fappiah@sktlive.com

(+233) 024 253 7640