

Tamba Konteh



Meng, MSc, Dip. AMIMechE

Doctoral Researcher @ Brunel Design School, Brunel University London

A determined and enthusiastic multi-discipline engineer with good communication and organisational skills. Also, I'm someone who seeks new challenges as opportunities to make impact and add value through innovative engineering and design solutions. Also experienced in project management, railway systems, and youth work.

Research Interest

Circular product design, design for sustainability, circular business models, circular economy

Education

- **Coventry University:** MSc in Aerospace Engineering **2016 – 2018**

Modules: UAVS, Flight Dynamics & Simulation, Aerospace Structures Design & Analysis, Mathematical Modelling in Aerospace Engineering, Computational Fluid Dynamics, Experimental Methods & Techniques, Individual Project (Modelling of Reversible Mechanical Flight Control Systems).

Projects:

- **MATLAB/Simulink Modelling of Aircraft Reversible Mechanical Flight Control System**
(Human factors - Haptic cue on active sidestick/inceptors)
Skills: Mathematical modelling of reversible mechanical flight control systems in both MATLAB and Simulink.
 - **Temperature and Strain Measurements on Coaxial Shafts of a GEnx-1B70 engine**
(Heat transfer analysis of a General Electric GEnx-1B70 high bypass turbofan engine)
Skills: Design of experiment, theoretical heat transfer analysis, temperature measurement, experiment instrumentation set-up, estimation of errors and uncertainty, and presentation of results.
 - **Numerical Investigation of Turbulent Flow Around Wall Mounted Circular Cylinder**
(Comparison of numerical investigation of turbulent flow and experimental results)
Skills: CAD design, CFD analysis using ANSYS Fluent and critical result evaluation.
- **Christ The Redeemer College:** Diploma in Youth Ministry **2015 – 2016**
 - **Oxford Brookes University:** MEng in Mechanical Engineering **2011 – 2016**

Modules: Computation and Modelling, CAD-CAM, Advanced Strength of Component-Fracture Mechanics, Advanced Materials Engineering and Joining Technology, New Product Development, Advanced Engineering Management, Noise, Vibration and Harshness, Stress Analysis, Automotive Engines, Thermofluids, Control Technology.

Projects:

- **Heat Exchanger Design** (using TRIZ Methodology to invent a heat exchanger).
Skills: 3D CAD modelling and CFD using Solidworks, theoretical, computational and experimental heat transfer analysis, materials selection, concept generation using TRIZ methodology to improve old product's efficiency and inventing a new product.
- **Handlebar Comfort Ride** (Vibration analysis of bicycle handlebars).
Skills: 3D CAD modelling of various handlebar designs using Solidworks, vibration analysis using ANSYS Fluent and materials selection.
- **Mechanical Engineering Project** (Research project for the development of a manufacturing process to produce luxury yachts which are made of aluminium honeycomb and assembled using engineering adhesives).
Skills: 3D CAD modelling of parts using Solidworks and CATIA, theoretical stress analysis and CAE using CATIA, engineering adhesives joint strength analysis and selection; and research on existing applications of aluminium honeycomb.
- **CAD Modelling of a V8 4-Stroke Internal Combustion Engine and Surface Modelling of Race Car Body** (CATIA software used for both modelling of engine and race car surface body).
Skills: 3D CAD modelling of engine parts, creating engineering drawings with geometric dimensioning and tolerancing, simulation (kinematics) and surface modelling.
- **Speed Rocket Train**
Skills: Mathematical modelling of rocket propulsion systems and speed rocket train 2 DoF of spring systems using MATLAB/Simulink software.
- **Human Powered Vehicle**
Skills: 3D CAD modelling of vehicle aerodynamic body using Solidworks, materials selection with CES EduPack and CFD analysis using STAR-CCM computational fluid dynamics software.
- **Firebrand Training:** APMG PRINCE2® 2009 Foundation/Practitioner **2011**

Key Skills

- **I.T Skills**
NVivo, ANSYS Fluent, CES EduPack, Solidworks, CATIA, Abaqus, MATLAB/Simulink, X-Plane, Mathcad, STAR-CCM, Open Foam, Crocodile clip, TinyCAD, Microsoft Office Suite, and presently learning Python and C++ programming language.
- **Communication**
Taught STEM subjects for GSCE and GCE A Level and regularly gives presentations to children, large youth and adult groups.
- **Organisation**
With multiple responsibilities including tutoring and leading a youth group, I managed my time efficiently whilst studying for both a diploma and a master's degree during the same period. I have also been proven to be meticulous with important and delicate tasks.
- **Working under pressure/difficult circumstances**
Focused and determined with a positive attitude to achieve set goals under difficult circumstances.
- **Teamwork**
A proven trusted team leader with track record of motivating team members whilst developing junior team members through delegation and leading by example.

Work Experience

- **Youth worker/Leader, Facility Manager (volunteer):** **Victory Centre Oxford** **2008 – Present**
Responsible for welfare issues of the youth and young adult. It includes education and social development according to the organisation's policy, statutory laws and guidance, management of halls, organisation of events and recruitment of team members.
- **Technical Author:** **CAD-IT LTD UK** **2019 – 2021**
Create 3D technical manuals using 3D CAD models of complete vehicle systems and other products, support IT consultants and clients.
- **Tutor:** **Alpha & Omega Tuition** **2017 – 2019**
Taught STEM subjects for GCSE & GCE A-Levels as a volunteer.

- **Seed Project Manager:** **Life Culture** **2006 – 2011**
Planning and implementation of seed projects for various charities and communities.
- **Driver, Railway Operator:** **MoD** **2004 – 2011**
Security, driving, shunting, and servicing various types of locomotives and trains, building and repair or railway tracks.

Interest

I enjoy doing DIY work including repairing machines and electrical appliances such as computers and home appliances, and reading engineering literature. I also play chess and scrabble, and volunteering for charitable work.