

As Head of PKFokam Mechanical Engineering Lab, I lead the PKFokam Innovation Lab Projects, supervising innovative solutions in robotics, AI-driven CNC optimization, subtractive and additive manufacturing, and sustainable engineering. My research, MSMAAI, optimizes machining sequences using ML and RL for Industry 4.0. With a Master's in Industrial Maintenance and Production Engineering, CNC certifications (Siemens 828D), and expertise in CAD/CAM (SolidWorks, ANSYS), I am open to PhD opportunities and industry R&D roles.

**CV online:** <https://william-timoh.vercel.app/>    <https://www.linkedin.com/in/timoh-chick-william-57a096375/>

## **EDUCATION CAREER**

- 2014-2016    HIGHER DIPLOMA MARINE ENGINEERING (Hons), GPA [4.0/4.0]**  
Regional Maritime University Ghana.
- 2009-2012    MASTER OF ENGINEERING DEGREE GPA [3.0/4.0]**  
**INDUSTRIAL AND PRODUCTION ENGINEERING,**  
Advanced National School of Agro-Industrial Sciences (ENSAI), University of Ngaoundere.
- 2006-2008    HIGHER DIP MECHANICAL ENGINEERING AND INDUSTRIAL AUTOMATION,**  
University of Technology (IUT) Douala, Cameroon. GPA [3.0/4.0]

## **CERFITICATIONS**

- 2022-2023    Research/Practical training proficiency,** at Kumaraguru College of Technology for Department of Mechanical Engineering India. <https://kct.ac.in/>
- 2020-2022    Certificate of proficiency in Material Testing** and analysis using Zwick/Roell Machine, by Avatar Solutions South Africa, Germany/UK partners. <https://www.gunt.de/en/>  
**Certificate of Proficiency of Professional Research and Training** for GUNT HAMBURG Germany Equipment for Engineering Education. <https://www.gunt.de/en/>  
**Certificate of EMCO Training Basic training** CT260, FB450, EMCOMAT20D, HMI Operate and Siemens 828D, Australia, CNC Machining specialist, programming maintenance Education [www.emcoworld.com](http://www.emcoworld.com)
- 2014-2016    Cadet ship Training Certificate**  
**Certificate of Proficiency for Seafarer with Security Awareness and Designated Security**  
**Certificate of Proficiency for Personal Survival Technique,**  
**Certificate of Proficiency for Fire Prevention and Fire Fighting,**  
**Certificate of Proficiency for Personal Safety and Responsibilities,**  
Regional Maritime University Ghana.

## **AREAS OF COMPETENCES**

- AI for Mechanical Engineers Specialization 2025
- Manufacturing, Fabrication, Mechanical and Engineering Design
- Mastery of usage of Research Tools,
- Material, Energy
- Structural design and analysis
- Product designs, computer-aided design/ modelling software
- Project Management

## **CORE AREAS OF ACADEMIC PERFORMANCE, PROFESSIONAL AND**

### **RESEARCH SKILLS**

- Artificial Intelligence / Industrial 4.0
- Project Management
- Product Design
- Production
- Processing
- Business-strategy & Marketing
- Industrial Automation
- Field-Engineering
- Robotic

- Initiate new business ventures and technological implementations
  - Perform measurements of mechanical devices and components
  - Provide Budget & deadline decisions with clients and project managers
  - Maintenance of diverse Industrial and Marine systems
  - Report preparation, data interpretation and analysis
  - Project Status reporting to the manager, client
  - Predictive and Systematic maintenance applications strategy
  - Maintenance Management
  - Computer-Aided Maintenance Management Systems (CMMS);
  - Computer Aided Manufacturing
  - Production Management (CAD/CAM)/ Material suggestion, supplier follow-up
  - Plants Maintainability and Reliability Engineering
  - Review, Renovation, Revision, Reconstruction
  - Fault Analysis, Rectification, Testing, Modifying and Re-testing of new machines
  - Servicing, checking, repairing machinery, equipment's systems
- Maintenance  
Reliability-Engineering,  
Engineering simulations  
Mechanical Designs  
Application Software  
Hydraulic /Pneumatic Engineering  
Structural Design  
Materials Characterizations  
Marine Engineering  
Mechanical Engineering  
Computational Simulation  
Data acquisition system  
Primavera P6s  
Oil And Gas Engineering  
Research and Professional  
Foundry and Welding

## **RESEARCH EXPERIENCES**

### **. Department of Mechanical Engineering**

- **Research/Practical training**, Kumaraguru College of Technology for Department of Mechanical Engineering in India. <https://kct.ac.in/>
- **Conference Participation:**  
**Theme:** Optimization of Data Research Management in African Universities  
 (Case study: Mechanical Engineering Technology Laboratory and workshops, PKFokam Institute of Excellence, University) Chaired by Dr Rochelle PACIO **At the 8<sup>th</sup> Edition of the PkFokam Conference on Science & Technology CAP of the PKFokam University Institute of Excellence, Yaoundé, Emana, Cameroon.** <http://www.pkfokam-cap.org/conference-on-science>,  
<https://pkfokam-jast.org/>

## **PROFESSIONAL EXPERIENCES**

- **PKFokam University Institute of Excellence, Cameroon 2019, Currently the HEAD OF LABORATORY of MECHANICAL ENGINEERING DEPT, [www.pkfinstitute.com](http://www.pkfinstitute.com)**
  - Completed the project of Design Requirements, Procurements, Commissioning and installations of State of the Art of Mechanical Engineering laboratory and Workshops Maiden in Africa, Cameroon.
  - Complete Design Requirements, Procurements, Commissioning and installations of CNC EMCOMAT/FB Universal Milling and Turning or Mechanical Engineering laboratory and Workshops.
  - Lecturer/Instructor in the following courses: Engineering graphics 2, Welding and CNC Machining and Programming, Engineering Materials, Manufacturing Automation, Metrology. Project Supervision and Planning, Workshop Practical's, Research.
- **WALLY CONSTRUCTION, Cameroon (2018-2019), Project Engineer:**
  - Computer Aided Design
  - Project Budgeting and Planning, Inventory Control and Stock management
  - Maintenance of mechanical, pneumatic, hydraulic, electrical systems;
  - Organizing, planning, company restructuring, material logistics.
  - Building Information Modeling Work, Simulations, Home Designs
  - Project scheduling and attributing to a series of workers
  - Developed a company maiden “I-build project” constructional web Marketing

## **ACHIVEMENTS**

Founder and Former President of Computational Engineering Design club at Regional Maritime University with over 240 members.

- Successfully initiated and completed signing of partnership contract Of two companies and Wally construction company
- **DESSIMINTEL in Accra Ghana (2016-2018). FREELANCER; 3D DESIGN ENGINEER**
- Provide project consultation services for clients such as KERSL Ghana, Stand code Engineering.
- Project research and development assistance: Finite element Analysis FEA and 3D Simulation, and Force and Stress Analysis, of oil storage Tank, CFD computation fluid analysis of heat flow for air conditioning Purposes for a series of clients.
- Supervised a project to design and simulate an automatic gutter Evacuator for the presentation at the German Academic Exchange Service called Falling Walls
- Development of a software App using Math-Lab for a KAAF University of Ghana
- **CAMEROON RAILWAY (CAMRAIL) in Douala, Cameroon (2011-2012):**
- Optimizing the systems Performance of Locomotives Types CC 2200 using Flash Based Memory Systems and troubleshooting, maintaining and wheel design

### **ICT SKILLS:**

Primavera P6, Microsoft Project, Microsoft Word, Excel, Access, Lean Six Sigma, AnyLogic (Pro&Research) Siemens PLC, Allen Bradley PLC, C++, MATLAB, Arduino, LabVIEW, Kongsberg, Simulation Trainer, Python, ROS, IoT Platforms. CAD/CAM: SolidWorks, Siemens NX, Autodesk Inventor, AutoCAD, Autodesk 360 ANSYS, SketchUp, 3ds Max SIMUMERIK, Creo Parametric, Additive Manufacturing, Siemens PLC, Allen Bradley PLC MATLAB Statistical Process Control (SPC), SAP Kongsberg Simulation Trainer, COMSOL Multiphysics, CFD, Simulink, AutoCast, PROCAST, LabVIEW, Schemaplic, Proteus, Embedded Systems Programming

**AI/ML:** Machine Learning Specialization (in progress), TensorFlow (in progress), Neural Networks and Deep Learning (in progress), Reinforcement Learning (in progress) Self-Driving Cars Specialization Training Package Specifications (Self Study In progress)

**LANGUAGE SKILLS** English Excellent, French Very good; fluent

### **REFERENCES**

**Dr. Samuel Ratna Kumar**  
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SELECTED POTENTIAL PUBLICATION (IN PROGRESS)

1. *Modeling Intelligent Robotic Systems for Autonomous Infrastructure Inspection Using Deep Learning and SLAM (currently In Progress)*
2. *AI-Driven Autonomous Machining Sequence Optimization for Smart Manufacturing*