FOLASADE AYOOLA

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EDUCATION

Doctor of Philosophy (in view) | ***Energy Science and Engineering*** — Apr. 2019 – December 2025
Stanford University — Stanford, California, United States

Master of Business Administration (in view) | ***Saïd Business School*** — Sep. 2022 – Sep. 2023
Oxford University — Oxford, United Kingdom

Certificate in Entrepreneurship and Innovation | ***Stanford Ignite*** — Jun. 2020 – Jul. 2020
Stanford Graduate School of Business — Stanford, California

Master of Science | ***Energy Resources Engineering*** — Sep. 2017 – Aug. 2020
Stanford University — Stanford, California

Bachelor of Science | ***Chemical Engineering*** — Oct. 2010 – Nov. 2015
University of Lagos — Lagos, Nigeria

WORK EXPERIENCE

Co-Founder, Chief Scientific Officer — Sep. 2020 – Jun. 2025
ElectricFish Energy Inc., *Technology Development & Strategy* — San Carlos, CA

- Developed distributed energy resource management system, including patented battery-integrated ultra-fast EV chargers with AI-driven optimization, achieving 90% cost reduction for make-ready deployment and and 2-hour commissioning of 350kW DCFC for electric fleet operators.
- Defined technical roadmap and cross-functional strategy aligning engineering innovation with market needs in mobility and grid resilience, leading cross-disciplinary teams to optimize system performance and integration with energy markets including demand response and vehicle-to-grid services (V2G).
- Secured $3.5M+ in grants, strategic corporate and venture financing while establishing partnerships with utilities across 5 U.S. states; negotiated agreements securing over $20M in debt financing and $160M sales pipeline for distributed energy solutions.
- Led technical and commercial solutions architecture, developing comprehensive energy financial models analyzing TCO, ROI, and grid resilience metrics and market-driven product road-mapping to win and deliver pilot deployments with utilities, film studios, fleet operators, municipalities, and real-estate developers across CA, MI, and NY to optimize grid-resilient mobility through demand-response and V2G integration.
- Designed business case models and investment memos for commercial partnerships with utilities, cities, and real estate/fleet operators, shaping adoption and financing of clean energy solutions.
- Drove ElectricFish to national acclaim – TIME Magazine named it one of America's Top GreenTech Companies (2024) and represented ElectricFish at global consortiums and industry forums (CharIN, TEP, COP), forging strategic partnerships and driving global adoption efforts in the U.S., U.K., France, Singapore, and Scotland.
- Managed company policy and regulatory strategy and states, including mapping policy, representing on regulatory working groups like VGI and drafting responses to regulation dockets.

Board Member — Sep. 2020 – Jan. 2022
ElectricFish Energy Inc., *Technology Development & Strategy* — Fremont, CA

- Incorporated company and served on the Board of Directors leading governance and financing term-sheet negotiations.

Research Fellow — Oct. 2021 – Mar. 2025
Benson Lab, *Satre Family Stanford Interdisciplinary Graduate Fellowship* — Stanford, CA

- Built scalable integrated transportation network model for decarbonization of heavy-duty trucking and drayage to assess the performance of refueling infrastructure investments published as an open-source simulation tool (GitHub).

- Developed data-driven models for heavy-duty transportation electrification with operator-attentive market constraints with persona-based trip synthesis, route-based fuel demand estimation, refueling behavior uncertainty modeling, refueling infrastructure investment portfolio optimization, economic feasibility and risk analysis.
- Assessed economic transition pathways for low-carbon sustainable finance with market instruments and incentive alignment in the political economy of oil-dependent economy, analyzing optimal infrastructure development plans for oil commodity revenue replacement with blue hydrogen in Nigeria.

Technical Consultant Apr. 2023 – Dec. 2024

SOUND Ventures, *SOUNDWaves VC Investment Technical Due Diligence* Los Angeles, CA *remote*

- Engaged as subject-matter expert to a leading VC on $5-$20 million hard-tech climate investments; delivered market analyses, competitive benchmarking, and technology readiness assessments across photoelectrochemical clean hydrogen and textile recycling.
- Conducted technical deep-dives with portfolio prospects' founding and engineering leadership to evaluate TRL, IP, and scale-up economics; synthesized into short-form IC briefs and investment memos for the managing partner.
- Held a 1:1 briefing with the firm's founder (a high-profile VC with a public profile in entertainment) to inform the final follow-up investment decision.
- Recommended diligence covenants and post-close technical KPIs to track commercialization risk and capital efficiency.

Research Assistant Oct. 2017 – Sep. 2021

Benson Lab, Stanford University, *Deep Decarbonization and Carbon Capture* Stanford, CA

- Developed decision-support models with technoeconomic and investment returns analysis for California oil production "greening" with produced water absorption-injection well and carbon capture, utilization & storage facilities under fiscal incentives of Section 45Q and LCFS.

Shultz Energy Fellow Jun. 2021 – Aug. 2021

Hawai'i Public Utilities Commission, *Office of Policy and Research* Honolulu, HI *emote*

- Awarded a Stanford Shultz Energy Fellowship to support Hawai'i's ambitious clean energy goals; delivered strategic analyses quantifying the potential deferred capacity and offset cost of electricity generation with vehicle-grid integration (VGI) on the Island of O'ahu in 2030 to inform utility financial incentive compensation within 8 weeks.
- Developed on utility and rate policy, including Performance Incentive Mechanisms (PIMs) to reward the utilities for the electrification of transportation, directly influencing regulatory goals and economic models for transportation electrification in Hawai'i.

Project Intern Jul. 2019 – Aug. 2019

Adpack Ltd., *Stanford Seed East Africa* Nairobi, Kenya

- Built real-time analytics and operational intelligence tools, improving manufacturing throughput by 10% and enabling more informed management decisions.

Process Technology and Innovation Engineer Apr. 2017 – Aug. 2017

Unilever Nigeria Ltd., *Non-Soapy Detergents Process Management* Lagos, Nigeria

- Developed and implemented end-to-end manufacturing process operations intelligence system, leading to a 97% reduction in material over-use cost and 13% factory top-line increase in two quarters while building systems to reinforce a culture of operational excellence.
- Coordinated teams across Nigeria, Kenya and South Africa to implement sustainable operations practices, including energy-efficient equipment retrofits, manufacturing up-time outage resilience improvements and waste-to-value programs and implementing large-scale operations management and continuous improvement.

Industrial Trainee Jul. 2014 – Dec. 2014

Chevron Nigeria Ltd., *Reserves and Reservoir Management Framework* Lagos, Nigeria

- Performed the reservoir development planning on an onshore formation
- Performed daily safety and maintenance walk-through, and custody transfer sampling and measurement with Process Engineering team at the Escravos Dehydration Unit and Gas Plant

Projects and Research

Operator-risk aware model for investment planning of heavy-duty ZEV refueling infrastructure 2024
Stanford University

Carbon-free fossil-fuel-based alternatives to oil and gas: Economic transition planning for Nigeria 2022
Stanford University

Technoeconomic analysis of the capture of California oilfield CO_2 emissions with produced water 2020
Stanford University

Moving towards a hydrogen future – the hydrogen economy of France, Italy, Portugal and Spain 2020
Stanford University

Optimizing a comprehensive CO2 network for time-varying carbon subsidies 2019
Stanford University

Optimal decision for generator, ESS dispatch in micro-grid under variability using RL algorithms 2018
Stanford University

Wind resource quantification & building integration of Vertical Axis Wind Turbines, Downtown SF 2018
Stanford University

Algorithm for the design of a cylinder-on-cone spray drying chamber 2015
University of Lagos

Process Plant Design for the Production of 45,000 tons per annum Titanium Dioxide 2015
University of Lagos

Estimating the duration of production plateau in water-flooded reservoirs 2014
Chevron Nigeria Ltd.

Patents

***Lead Inventor*, US-11769094-B2 (ElectricFish Energy)** 2023
System and method for real-time distributed micro-grid optimization using price signals

***Co-inventor*, US-11270243-B1 (ElectricFish Energy)** 2022
System and method for electrical grid management, risk mitigation, and resilience

Conferences and Presentations

***Delegate*, Stanford University, Non-Governmental Observer to the Parties** Nov. 2022
2022 United Nations Climate Change Conference (Sharm El Sheikh)

***Delegate*, University of Oxford, Non-Governmental Observer to the Parties** Nov. 2022
2022 United Nations Climate Change Conference (Sharm El Sheikh)

***Presenter*, Analysis of Hydrogen as a Transition Alternative For O&G-Dependent Countries** Oct. 2022
Greenhouse Gas Technologies Conference, GHGT-16 (Lyon)

***Speaker*, Resilient Energy Infrastructure for Communities** Dec. 2021
Transportation Electrification Partnership Summit

***Delegate*, Stanford University Non-Governmental Observer to the Parties** Nov. 2021
2021 United Nations Climate Change Conference (Glasgow)

***Panelist*, Not a Fleeting Opportunity: Startups Discuss the Big Rig Revolution** Jun. 2021
EPRI Electrification 2021: Frontiers of e-Mobility

***Speaker*, Vehicle to Grid Integration Technology** Jun. 2021
EPIC Energy Innovation Virtual Tour: Low-Carbon Solutions for Increased Reliability

Absorber Design and Operational Feasibility for CO_2 capture with Brine Nov. 2018
Stanford Center for Carbon Storage Seminar

Honors and Awards

Stanford Impact Founders Prize (AetherX Tech) 2025
Stanford GSB prize for emerging social entrepreneurs and ecopreneurs as they test, implement, and iterate on their venture ideas

TIME America's Top GreenTech Companies (ElectricFish Energy) 2024
Comapny founded ranked by TIME Magazine in collaboration with Statista and Lexis Nexis as one of the top climatetech companies in the United States

Finalist, RVLT50 2023
Lee Kuan Yew Global Business Plan Competition, Singapore

Forbes 30 under 30 in Energy, North America 2022
Recognition by Forbes editors and expert industry judges as a member of the world's most impactful community of young entrepreneurs and game-changers

Stanford Global Energy Heroes Prize Awardee 2022
Global competition by the Stanford Precourt Institute for Energy's Global Energy Forum recognizing young people using sustainable energy to make a positive impact in their communities

Satre Family Stanford Interdisciplinary Graduate Fellow 2021
Competitive university-wide program awarding three-year fellowships to outstanding doctoral students engaged in interdisciplinary research

Shultz Energy Fellow 2021
Stanford University (Precourt Institute for Energy) Fellowship integrating students into energy and climate ecosystems in the West

On Deck ClimateTech (ODCT) and Build for Climate (ODB4C) Fellow 2021
On Deck talent and innovators community program for entrepreneurs building climate solutions

Winner, USAEE Case Competition 2020
National case-study competition assessing the hydrogen economy in Europe

Recipient, MTN Foundation Scholarship Award 2012-2013
Merit-based scholarship for university students in STEM

Recipient, NNPC-Chevron Nigeria Limited Joint Venture Undergraduate Scholarship Award 2011-2014
Merit-based scholarship for university students in oil and gas-related STEM fields

Awardee, NNPC-Shell Nigeria Joint Venture Undergraduate Scholarship Award 2011-2014
Merit-based scholarship for university students in oil and gas-related STEM fields

Awardee, NNPC-Mobil-Producing Nigeria Joint Venture Undergraduate Scholarship Award 2011-2013
Merit-based scholarship for university students in oil and gas-related STEM fields

Dean's List 2011 - 2016
Recognition for First Class Students in the Faculty of Engineering, University of Lagos

Teaching Experience

Ethical STEM: Race, Justice and Embodied Practice (TAPS 151D) (Teaching Assistant) Winter 2021/2022
Stanford University Stanford, CA

Introduction to Black Studies (AFRICAAM 105) (Teaching Assistant) Fall 2021/2022
Stanford University Stanford, CA

Carbon Capture and Sequestration (ENERGY 253) (Teaching Assistant) Fall 2020/2021
Stanford University Stanford, CA

Sustainable Energy for 11 Billion (ENERGY 104) (Teaching Assistant) Spring 2018/2019
Stanford University Stanford, CA

Automative Technology and Practice (MEC 227) (Secondary Instructor) S2, 2016/2017
Moshood Abiola Polytechnic Ogun, Nigeria

Mechanical Engineering Science (MEC 124) (Teaching Assistant) S2, 2016/2017
Moshood Abiola Polytechnic Ogun, Nigeria

Mechanical Engineering Lab Tools and Practices (MEC 126) (Teaching Assistant) S2, 2016/2017
Moshood Abiola Polytechnic Ogun, Nigeria

COMMUNITY INVOLVEMENT

Stanford Energy Resources Engineering Fall 2020 – 2022
Graduate Student Wellness Liaison Stanford, CA

Women in Earth Sciences Summer 2020 – 2022
Executive Board Member Stanford, CA

Stanford Energy Resources Engineering Summer 2018 – 2022
New Graduate Student Mentor Stanford, CA

Black Engineering Graduate Student Association Summer 2020 – Spring 2021
Co-President Stanford, CA

Erevna Fellowship Fall 2020
Research Mentor Harvard, MA

Stanford Future Advancers of Science and Technology Fall 2018 – Winter 2019
Mentor San Jose, CA

Mentally Aware Nigeria Fall 2016 – Summer 2017
Volunteer Lagos, Nigeria

SKILLS

Languages
English (Native), Yoruba (Native), French (B1).

Programming
Python, MATLAB, Julia, GIS, Git, Bash, R, Java, C++, Bash, Javascript, Microsoft Excel, LaTeX.

Energy Modeling Open-source Tools
California Avoided Cost Calculator, CapacityExpansion.jl, Crane Tool, En-ROADS, GCAM, urbs.

Data Modeling Tools
PyTorch, SciKit, Gurobi, Seaborn, Claude Code.

Statistical and Machine Learning Methods
Linear Programming, Regression Analysis, Data Clustering, Principal Component Analysis, Q-Learning, Markov Decision Processes, Monte-Carlo Simulation.

Financial Modeling
Three-Statements, Discounted Cash Flow (DCF), Project Finance, Corporate Valuation, Electricity Rate Base Analysis.

Technical and Product
Applied Research, Product Strategy, Sprint Planning, Product Roadmapping, Software Architecture, Budget Management

Leadership and Communication
Public Speaking, Corporate Governance, Fund Raising, Contract Negotiation, Technical and Executive Recruiting, Stakeholder Engagement, Product Development, Sales & Business Development,Team Management, Technical Writing, Grant Writing.