EDWIN DELE OBUNE
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Professional Summary

I have a good background in **Physics and Mathematics.** Experienced, talented and self-motivated, who has excellent organizational skills, highly efficient and very capable. My desire is to complete my PhD in Physics and a very good Atomic, Molecular and Optical Physicist.

Research Interests

Theoretical and Experimental Light Matter Interaction
Nonlinear Quantum Mechanics
Ultrafast laser sciences and nonlinear optics

Skills

Linux/Unix, Matlab, High Performance Computing, Fortran, C/C++
Laser Physics and operation of a sub-8 femtosecond Ti: Sapphire laser system, ParaView and Avogadro application for research presentation, visualization and publication.
Light Matter Interaction Simulation Program: The use of SALMON, an open-source computer program for ab-initio quantum-mechanical calculations of electron dynamics at the nanoscale that takes place in various situations of light-matter interactions. It is based on time-dependent density functional theory, solving time-dependent Kohn-Sham equation in real time and real space.

Education

PhD Physics, University of Alabama, Huntsville, Alabama, August 2021 to Present
M.Sc. Physics, University of Washington, Seattle, Washington - COMPLETED
B.Sc. Physics/Mathematics, University of Wisconsin, River-Falls, Wisconsin- COMPLETED
B.Sc. Geology, University of Wisconsin, Oshkosh, Wisconsin- COMPLETED

Experience

University of Alabama, Huntsville, Alabama

August 2021 - Present
Graduate Teaching Assistance/Graduate Research Assistance----Physics

Houston Community College, Houston

June 2018 – Present
Adjunct Professor of Physics
As an Adjunct Professor, I'm currently teaching the lecture and the laboratories for Calculus and Algebra based: classical mechanics, Thermodynamics, Oscillations and Waves. Electricity, Magnetism, Electromagnetic waves, Geometric Optics and Wave Optics.
Independently conducted lectures and labs for undergraduate engineering students
• Organized, collected, graded and reported exams as well as lab assignments

Sam Houston State University, Huntsville, Texas

Department of Physics and Astronomy
January 2021—August 2021
Lecturer—Full Time Physics Faculty

As a full time Lecturer, I teach the lecture and the laboratories for Calculus and Algebra based undergraduate physics: classical mechanics, Thermodynamics, Oscillations and Waves. Electricity, Magnetism, Electromagnetic waves, Geometric Optics and Wave Optics.
Independently conducted lectures and labs for undergraduate engineering students
• Organized, collected, graded and reported exams as well as lab assignments
• Lectured for the subjects: Electronics principles, Network analysis and Electromagnetics theory
• Taught labs for the subjects: Electronics principles, Basic Electrical and Electronics engineering, Network analysis,

University of Houston, Downtown Houston
January 2020 – December 2020
Adjunct Professor of Physics
As an Adjunct Professor, I'm currently teaching the lecture and the laboratories for Calculus and Algebra based: classical mechanics, Thermodynamics, Oscillations and Waves. Electricity, Magnetism, Electromagnetic waves, Geometric Optics and Wave Optics.

San Jacinto College, Houston
June 2017 – December 2020
Full Load Adjunct Professor of Physics
As an Adjunct Professor, I'm currently teaching the lecture and the laboratories for Calculus and Algebra based: classical mechanics, Thermodynamics, Oscillations and Waves. Electricity, Magnetism, Electromagnetic waves, Geometric Optics and Wave Optics.
Independently conducted lectures and labs for undergraduate engineering students
• Organized, collected, graded and reported exams as well as lab assignments

Professional Experience
TGS-NOPEC – Norwegian Oil Gas Services Company-Houston, TX -perm (laid off due to oil prices)
October 2015 - April 2016
Senior Geophysicist
- Member of a team that Worked to implement codes that runs on computer clusters
- Performed benchmark tests of the forward solver implemented in 2D Full Wave Inversion code
- Altered C program code for forward modeling and inversion code
- Velocity modeling, sub-salt modeling and interpretation
- Review and Revise the work flows as appropriate to meet changing project needs and requirements

Ion Geophysical Corporation-Houston, TX
February 2007 - June 2014
Research Geophysicist.
- Velocity modeling and sub-salt modeling
- Performed testing of several codes
- Run Elastic Forward Modeling (Finite Difference Method) to generate synthetic data
- Run Full Wave Inversion program
- Member of a team that writes code for seismic Tomography
- Creating processing workflows and testing of leading edge imaging tools.
- Worked with research team to implement codes
- Worked with research team to resolve code execution problem

Accomplishment
- Mentoring and Training of new hire employees
- Processed and Delivered seismic images of 2D lines to clients

- Processed and delivered seismic volumes to clients within an agreed time of completion
- Worked with research groups to resolves errors and other issues during migration
- Inverted near surface seismic for shear wave velocity
- Tied well data with seismic
- Developed guidelines and tutorial to help newly hired worked on 2D lines without constant supervision

Department of Physics, University of Washington

- Job Title: Teaching Assistant.
  Responsibility: Teaching assistance for physics, classical mechanic lab.

Abstract Publication

- **Comparison of Methods Used in the Analysis of Rayleigh Wave Dispersion and Inversion**
  Edwin Dele Obune*, Texas A&M University, College Station, Texas; SEG Extended Abstracts, 2015.

- **Comparison of shear-wave velocity from Rayleigh waves inversion**
  Using different 3C receivers: Blackfoot oilfield Alberta. Edwin Obune and Dr. Robert Stewart; EAGE Extended Abstracts, 2012

Technical Presentation

- **SEG, 2015 Conference, New Orleans, Louisiana**
  Comparison of Methods Used in the Analysis of Rayleigh Wave Dispersion and Inversion *Edwin Dele* Obune*, Texas A&M University, College Station, Texas

- **EAGE, 2012 Conference, Copenhagen, Denmark**
  Comparison of shear-wave velocity from Rayleigh waves inversion using different 3C receivers: Blackfoot oilfield Alberta. E.D. Obune.