**CONTACT INFO:** **Wilfred Henry** Box 1082

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Phone: 724-355-4452 Fax: 877-571-0416

**Citizenship:** United States of America

**OBJECTIVE:**

A challenging position working with students and helping them to gain knowledge by utilizing my skills developed through my experience and education, with the opportunity for professional growth based on performance.

**EDUCATION:**

**2010** California University of Pa: Masters of Arts: Secondary Education Physics

**2006** California University of Pa: BS Electrical Engineering Technology

**2005** California University of Pa: BA Physics

**2003** Studied Nanofabrication at Pennsylvania State University

Total Units in **Physics: 49** **Math: 74** **Electronics & Industrial: 70**

CERTIFICATIONS:

Business, Computers, Information Technology (K-12\_

Secondary Education Physics (7-12)

Secondary Education Mathematics (7-12)

Technology Education (K-12)

Artificial Intelligence - Appinlabs

Nanotechnology - Appinlabs

Bioinformatics - Appinlabs

AutoCAD 2D/3D

Lifeguard – 1995

First Aid / CPR – 1995

**EXPERIENCE:**

* Cyber-school instructor (Waterfront, PA) – Teaching Physics 2011 - Present
* Day to day substitute at McGuffey School district (Claysville, PA) – Teaching Physics and Physical Science, 2011 - Present
* Day to day substitute at Trinity Area School district (Washington, PA) – Teaching Physics, Math and General Science 2012 - Present
* Did student teaching at California Area High School (California, PA) – Teaching Physics, Integrated Science I, and Principals of Technology, 2010
* Tutored students in Math, Physics, and Engineering at both Butler County Community College and California University of Pa at the professor’s request, 1996 to 2010
* Troubleshooting Atomic Force Microscope and other equipment in California University of Pa Nanoscience Research Group, 2000 to 2010
* Managed & assisted at events in regional science Olympiad, 2009
* Consultant to various industry and research groups performing calculations on electromagnetic fields, gravitational fields and mathematical investment models, 1994 to 2010
* Sales, Support, and Repair Associate for computers and office equipment, Silo Incorporated, 1994
* Microfilming technician for Mellon Bank (Manpower temp), 1994
* Member of software development team for IBM voice type project, 1994 to present
* Installed generators, uninterruptible power supplies and computer floors for Woodhyrst Inc, 1995

STUDENT PROJECTS DONE:

* Inverted Pendulum control project (university internal document)
* RF antenna design - signals from the NIST (university internal document)
* Micro terminal with barcode reader and Magnetic strip reader (university internal document)
* Robotics Programming for assembly line (university internal document)
* Water level sensor (technical internal document)
* Ultrasonic Transducer tracking system (university internal document)
* Optics & Coatings in nanotechnology (university internal document)
* Earthquakes - Harmonic Generator using circuits (university internal document)

**AFFILIATIONS:**

* International Electrical and Electronic Engineers [IEEE]
* Kappa Kappa Psi National Band Fraternity
* Alpha Phi Omega National Service Fraternity
* Odyssey of the Minds
* Society of Physics Students [SPS]

**Science Competitions:**

* Odyssey of the Minds (Judge)
* PJAS (Judge)
* Science Olympiad (Judge)

**COMPUTER and TECHNICAL SKILLS:**

* C++
* FORTRAN
* UNIX
* WINDOWS 9X/XP/NT/7
* AUTOCAD
* BASIC
* ASSEMBLER
* Embedded Systems
* Digital Signal Processing
* Lab View
* FileMaker Pro
* Batch file programming
* Programmable Logic Controllers
* Circuit Design & Simulation
* Nanofabrication
* Computer Networking
* Electronics Testing
* Formal Logic
* Robotics
* Microsoft Office
* Bio Informatics
* Artificial Intelligence
* Logger Pro
* GLX – Pasco
* Activ Inspire –SmartBoard
* Data Studio
* Interactive Physics
* Adobe Premier
* Power Systems
* Instrument Design
* Wet Lab Chemistry
* Antennae Design
* Photo Studio
* Solid State Physics

EQUIPMENT USED:

Digital/Analog Oscilope

Multimeter

Function Generator

Power Suply

Karl Suss MA6 Contact Aligner

Karl Suss MJB3 Mask Aligner

Nikon Stepper

Edwards E306A Evaporator

Kurt Lesker E-gun / Thermal Evaporator

Plasma Therm ECR-PECVD

Low Pressure Chemical Vapor Deposition (LPCVD) System

Applied Materials P5000 MERIE

Variable Angle Ellipsometer L116C

Trencor Model 500 Surface Profilometer

JEOL JSPM-4500A Ultrahigh Vacuum Scanning Probe/SEM Microscope

Veeco CPII Atomic Force Microscope

UV-Vis Spectrometer

Vacuum Systems.

\*\* **REFERENCES:**Furnished upon request \*\*