CURRICULUM VITAE OF MICHAEL JOSEPH STAHL, P.E., CFEI

March 2022

I. GENERAL INFORMATION

A. **POSITION**:

Electrical Engineer Verité Forensic Engineering, LLC. 10070 Airport Road Conroe, TX 77303

II. PROFESSIONAL SUMMARY

A. **EDUCATION**:

Bachelor of Electrical Engineering Technology Temple University, Philadelphia, Pennsylvania, 1991

B. PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS

Licensed Professional Engineer, State of Texas License No. 125382

Certified Fire and Explosion Investigator (CFEI) National Association of Fire Investigators, International

C. **EXPERIENCE:**

Electrical Engineer Verité Forensic Engineering, LLC. January 2018 to Present

Forensic engineering analysis of disaster related incidents, accidents, and electrical system installations with specialties in analog/digital microelectronics, vehicle electronic/electrical systems, and in power systems.

Electrical Engineer Consultant National Loss Consultants, Houston, Texas June 1998 to December 2017

Conducted investigations, analysis, and testing of various products and electrical system installations to determine their failure mode.

Chief Engineer in Design and Manufacturing Purist Audio Design/Stahl~Tek, Clute, Texas June 2000 To December 2012 Engineer and Associate Member

- Participated and contributed in the decisions making process regarding engineering related topics in the day-to-day Operations and Management of the company.
- Chief designer for product design, process manufacturing, custom electronic projects, custom instrumentation equipment design for quality control, and specialized in-house manufacturing/processing equipment.
 - Research and design new products from working proto-types using software modeling tools and metal CNC machining tools, to the design of the manufacturing process, to the quality control of the final product.
 - Developed new improvements in the electrical, mechanical, and material design of existing products.
 - Research and design more efficient manufacturing techniques using the newest available materials, adhesives/resins, equipment, and etc.
 - Design and construct custom manufacturing/processing equipment for in-house use.
 - Design and manufacture custom electronic equipment including power conditioners, pre-amplifiers, discrete amplifiers, digital PWM VFD motor controllers, precision 24-bit audio digital-to-analog converters, music servers, CD audio transport players, USB2.0/computer streaming audio digital interface hardware, digital audio interfaces utilizing lithium-ion battery power systems etc. for local and international clients.
 - CE (Conformité Européenne) Mark Certification Testing on electronic audio products manufactured for and sold in the European Economic Area (EEA).
- Network Architect of hardware/software systems for Purist Audio Design's home and remote offices.
 - Installation, Operation, and Maintenance of Window/Mac base LAN, including
 office and lab PC workstations, general file servers, email server, DNS servers,
 Ecommerce server, UPS Systems, Remote Access equipment (VPN connection
 via /Watchguard firewall appliances), Network Hubs, Routers, and supporting
 hardware.
 - Project Manager and consultant for the development and installation of custom software database tools and supporting hardware used in the business operations of the company ranging from documentation, to inventor control, to sales/invoicing, to production scheduling.

Laboratory Manager

Temple University, Department of Electrical Engineering, Philadelphia, Pennsylvania 1992 to 1998

- Advise and assist in development, design and construction of research projects and general lab experiments for Graduate/PhD., Undergraduate and High School program students.
- Coordinate department lab operations, developments, and implementation.
- Network Manager of electrical engineering faculty and student network.
- Project Engineer and advisor in the design of the Power Management System (1994),
 the Design of the Data Acquisition System (Best Electrical Engineering Senior

Design project, 1995), and in the Design of the Fuel Management/Ignition System (1996) for the University Competition SAE Formula One Race Car.

VP Engineering Impact Technology, Ltd., Ambler, Pennsylvania 1996 to 1998

Project Engineer for product design, manufacturing, product testing, and quality control.

- Projects included analog/digital designs for electrical/mechanical acoustical reproduction systems, small signal amplifiers, general high-power amplifiers, analog filter systems, linear/switching power supplies, multi-bit digital to analog converters, digital/analog multiplexers for audio preamplifiers and digital/analog DC servo motor controllers.
- Designs involved the utilization of specialized electrical simulation tools and CAD software for schematic and PC Board development and construction of DC Linear Amplifiers for 2-axis shaker tables, high-end audio 200-watt MOSFET Stereo Amplifiers, FET/BJT Stereo Preamplifier, 20 bit Digital to Analog Processor for high-end CD Player Transports and active 6th order low pass filters for sub-woofer amplifiers.
- Responsible for the circuit modifications/upgrades to Audio Synthesis DSM Ultra Analog digital-to-analog processors.

Computer Consultant

Temple University, Engineering Computer Center, Philadelphia, Pennsylvania 1987 to 1992

- PC Lab coordinator, support, and network management.
- CAD support for all departments.
- Computer graphics/AutoCAD Teaching Assistant.
- Developed and implemented the interfacing of 2-D CAT (computed tomography) scan data to a computer generated 3-D Solid-Modeling.
- Graphics, database development for Temple Cancer Research Center.
- Consultant for FORTRAN, Pascal, Numerical Methods, Matlab, 3-D Solid Modeling I-DEAS, AutoCAD, and computer labs.
- Maintained and repaired computer and peripheral equipment.
- LAN hardware/software installation of Novell 386 V3.01.

D. SOCIETY MEMBERSHIPS/COMMITTEES:

National Association of Fire Investigators (N.A.F.I.) Member Number: 23074

E. Continuing Education and Seminars <u>Attended</u>:

International Union of Operating Engineers Hazmat Training Program Local 835, Philadelphia, Pennsylvania - OSHA 29 CFR 1910.120, 40-HOUR TRAINING, HAZARDOUS WASTE Completed, 1996

International Association of Arson Investigators, INC, Biloxi, Mississippi INVESTIGATION OF ELECTRICAL APPLIANCE RELATED FIRES 20-HOUR Classroom Training Seminar Completed, 1999

International Association of Arson Investigators, Inc.
3-HOUR Tested Training Program,
"The Deposition Part 1: Format, Content, and Preparation", Presented by I.A.A.I., CFI TRAINER.NET®
Completed, April 2015

International Association of Arson Investigators, Inc. 4-HOUR Tested Training Program, "Basic Electricity", Presented by I.A.A.I., CFI TRAINER.NET® Completed, April 2015

Asbestos Standard for the Construction Industry, OSHA 29 CFR 1926.1101 Training, HRS/CEU/CME: 2.0/0.2/2.0 Completed On: 4/9/2017, Valid Thru: 4/9/2018

National Association of Fire Investigators, International International Fire, Arson, & Explosion Investigation Training Program 32-HOUR COURSE, Conducted in Dallas, Texas Completed, March $12-15,\,2018$

AVO Training Institute, Inc, NFPA 70E – Electrical Safety 14-Hour Course, Conducted in Houston, Texas Completed, November 14 – 15, 2019