Josh Lane, EIT

joshlaned@gmail.com · 1209 NW 43rd St., Gainesville, Fl, 32641 · 719-246-8169

Education

Est. Spring 2021 MS in Electrical Engineering, *University of Florida*

-Specialization in MEMS devices design and fabrication, wireless technology

Fall 2015 BS in Environmental Engineering, *University of Florida*

-Specialization in water treatment plant

Experience

Technical Consulting Resources | 3401 Custer Rd., Plano, TX, 75023
CEO - John Novak, jnovak@tcrnet.com
IT Resources ***(10/2016 – 05/2018)***

- Building virtual servers
- Customer support
- IT security features

Personal Heating Devices Inc. | 1022 NW 4th Ave., Gainesville, FL, 32601
CEO ***(12/2014 – 06/2015)***

- Product development/ Manufacturing
- Marketing through online media
- Legal responsibilities of owning and operating

Foundation for Applied Molecular Evolution | 13709 Progress Blvd, Alachua, FL 32615
CEO - Steven Benner, sbenner@ffame.org
Lab Technician ***(10/2014 – 05/2015)***

- Using the SELEX process to find an ideal DNA aptamer for an anthrax protein
- Electrophoresis gel loading and analysis
- Mass spectrometry analysis
- Radiation testing certified

FDOT State Materials Office | 5007 NE 39th Avenue, Gainesville, FL 32609
State Geotechnical Materials Engineer- David Horhota, 352-955-2924
Geotechnical materials specialist ***(05/2013 - 05/2016)***

- Certified through ACI for Aggregate Base Testing Technician certificate
- Resilient modulus testing operator
- Sample preparation
- Field operations for core sample drilling

University of Florida Environmental Engineering | Black Hall
PhD Candidate- Akua Oppong-Anane, oaakua@ufl.edu
Research Assistant ***(Fall 2013)***

- Effects of sulfides and oxygen on the transport of iron from leachate
- Spectrometer Analysis

Projects

- Neural probe using an optical waveguide, carbon nanofiber electrodes, and a microfluidic channel to stimulate and measure responses from the brain *(current)*
- Phosphate sensor using Sb, Pt, and Co active elements for efficient measurement of phosphates *(current)*
- Publication: Elisa Biondi, Joshua D. Lane, et al.; Laboratory evolution of artificially expanded DNA gives redesignable aptamers that target the toxic form of anthrax protective antigen, *Nucleic Acids Research*, Volume 44, Issue 20, 16 November 2016, Pages 9565–9577
- Microfabrication of diode on silicon wafer (< 1mmx1mm)
- Temperature controller for regulating temperature
- Automatic control of watering and temperature control for houseplants using Arduino
- Odometer and speedometer using Arduino

Skills

- Proficient use of MATLAB, electronic circuit design, Computer Aided Design (CAD), Geographic Information System (GIS) software, HTML coding, CSS coding, and Excel
- Experience with specialized machinery (e.g. metal lathe, drill press), expertise in mechanics (motorcycle and auto)
- Bilingual (English & German)