

Industrial designer & electrical engineer with excellent communication skills, specializing in user-centered design of complex systems of hardware, software, services and process

## **EDUCATION**

Master of Science in Industrial Design  
Philadelphia University, 2013

Bachelor of Science in Electrical Engineering  
Pennsylvania State University, 1990

## **CERTIFICATIONS**

Professional Engineer, Commonwealth of Pennsylvania  
License # PE070908, issued June 8, 2004

Professional Engineer, State of New York  
License # 085101, issued July 31, 2007

NCEES Record # 28334

## **PROFESSIONAL EXPERIENCE**

### **Cofounder, Director of Connected Devices, Noria Technologies, LLC, 2016 to present Philadelphia, Pennsylvania**

- Noria is a manufacturer of innovative, connected home comfort products beginning with a 5000 BTU window air conditioner that successfully funded through Kickstarter and Indiegogo and that is scheduled for production and backer fulfillment in 2017 with retail presence by Q2 2018
- Director responsible for strategy and development of all electrical, electronic and Internet of Things (IoT) features across the Noria product line and supporting cloud services
- Manage a mix of in-house and contracted talent to meet development goals while also contributing my own skills in circuit design and embedded firmware programming
- Oversee the electrical/electronic supply-chain of distributors, component vendors, board fabrication and assembly houses
- Coordinate with mechanical engineers and other industrial designers to ensure all electrical systems integrate seamlessly with all other systems and assemblies

### **Principal, Likuma Laboratories, LLC, 2014 to present Philadelphia, Pennsylvania**

- Prior position: Design Intern, 2012 to 2013
- Product development for a wide variety of both client and in-house projects
- Designing user interfaces and electrical/electronic control systems of small/medium home and commercial appliances, including multiple patent-applied-for new products
- Design and engineering-focused project management
- Prototyping and model-making

**Principal Consultant, 2015 to 2016**  
**Macro, a division of Ross & Baruzzini, Chalfont, Pennsylvania**  
**Systems Engineer, 2001 to 2015**  
**Clifton, Weiss & Associates, Gwynedd Valley, Pennsylvania**

Highlighted Projects:

- Designed key elements of SEPTA Positive Train Control, a system that automatically prevents train accidents, including a new data network connecting primary and backup control centers with locations along 151 miles of rail lines through five counties.
- Designed SEPTA Smart Stations and New Payment Technology Control Centers to improve customer experience and safety while reducing costs. Developed UI screens as well as data connections to escalators/elevators, pumps, compressors, doors/gates, fire alarms and fare vending machines at 60 subway stations to provide timely alerts of equipment problems.
- Conducted user research and developed executive strategies for implementing passenger information systems for South Florida Regional Transportation Authority. Interviewed and surveyed authority employees, observed passenger behavior at rail stations, analyzed best practices at other agencies and researched current industry technology.
- Designed an upgraded Operations Center and new Emergency Backup Center for Metro-North Railroad to improve performance, reliability and safety. Also designed IT networks connecting the control centers to 120 stations and other sites along 384 miles of rail lines in New York and Connecticut.

**Systems Engineer, 1995 to 2001**  
**STV Incorporated, Philadelphia, Pennsylvania**

Highlighted Projects:

- Tested newly purchased Long Island Rail Road locomotives and passenger coaches to validate performance on 9-mile railroad test track at the Transportation Technology Center in Pueblo, Colorado.
- Performed tunnel site surveys, researched communications technologies and developed conceptual network architectures for Long Island Railroad's East Side Access to Grand Central Terminal in Manhattan.

**Sales Engineer, 1991 to 1995**  
**Unitek International Corporation, Mt. Laurel, New Jersey**

- Provided engineering, business and cultural-liaison consulting services to an array of Chinese and US companies seeking to establish technology transfer relationships.

**COMPUTER SKILLS:** AutoCAD (2D & 3D), SolidWorks, Adobe Creative Suite, Interactive Prototyping (C, Python, Arduino, Processing, Android), HTML/CSS/JS

**TECHNICAL SKILLS:** Rapid prototyping, embedded systems, electronic design/prototyping, wired/wireless data networking, electrical & data wiring, welding