Andrew Lynch

Forensic Engineer

alynch@alynch.org

Experienced in forensic investigation in electrical and mechanical systems.
Expertise on lightning, HVAC, High Voltage, Explosions, Fire or Water Damage.

Available for expert testimony or subrogation claims.

PE License in TX, FL, OK, LA, CO, and AZ

Experience

Forensic Engineer at ProNet Group, Inc.

September 2015 - Present

- Forensic engineering investigation on electrical and mechanical systems.
- Experienced with cybersecurity, lightning, electrical theft, explosions, subrogation, fire and water damage.
- Expertise on motors, pumps, sensors, switchgears, transformers, HVAC , batteries and electro-mechancial equipment.

Engineer at Jacobs

May 2014 - July 2015 (1 year 3 months)

- Rapid response consultant to analyze and propose improvements to existing oilfield operations.
- Created Finite Element Analysis (FEA) for High temperature, Vibration and Fluid Dynamic Models.
- Proficient with ANSYS , Autodesk, Solidworks & Intergraph software suites.
- Created reservoir and transient process flow simulations with AFT impulse & Pipeline Studio.
- Sustaining & reliability engineering for various refinery and drilling projects.
- Wrote python & C# software for data visualization.

Engineering & Research at Sparx Engineering

March 2012 - April 2014 (2 years 2 months)

- Engineering Consultant to various clients from bio-medical and oilfield industries.
- Designed electronic circuits in Altium.
- Created desktop applications in C#
- Designed parts in Solidworks for 3D printing and rapid prototypes
- Created embedded software for microcontrollers and wireless networks.

Research Staff at Carnegie Mellon University
May 2007 - September 2007 (5 months)

Designing electronics and field testing on Robotic Aerial Vehicles for military inspection.

AUV Designer at Applied Research Labs
April 2006 - November 2006 (8 months)

Designing a brushless motor control for an autonomous underwater vehicle (AUV).

Avionics & Robotics at NASA
January 2005 - August 2005 (8 months)

Custom electronics design for the ER5 group on tactile sensors for robotic hands. Simulation work on the physics of Aercam docking for ER7. Building an FPGA interconnect tool for a software defined radio in the EV (avionics group).

Education

Rice University
MS, Computer Science, 2009 – 2011
MS, Mechanical Engineering, 2007 – 2009

The University of Texas at Austin
BS, Electrical Engineering, 2003 – 2007