akauff.net

Lighting, Sound, and Software Technician

Education

Bachelor's of Science, Theatrical Production
Bradley University (2014)

Bachelor's of Science, History Bradley University (2014)

ETC Authorized Service Provider (2019)

Work Experience

KSA Lighting and Controls

Systems Integrator 2018-Present

- · Started up architectural lighting systems
- Advised electrical contractors on installation of lighting systems
- · Created tools to complete startups faster

Entropy Precision Systems

Software Developer (Independent Contract) 2017-2018

- Created software interface to operate an LED controller
- Assisted in selecting hardware solutions for problems in the design process

Luftwerk

Software Engineer and Electrician 2017-Present

- Designed electrical systems for art installations
- · Wrote software to run art installations
- Installed hardware for art installations

Various Chicago Theaters (Freelance)

Electrician and Programmer 2014-present

- Installed electrical equipment
- · Created and executed power and data distribution plans
- Responsible for troubleshooting faulty equipment
- Installed structural rigging equipment
- Programmed lighting consoles
- · Maintained building infrastructure
- Installed and configured IP network systems for lighting and sound control hubs
- Created custom electrical props with built-in show control
- Operated sound and lighting consoles during performances

Crate and Barrel Photo Studio

Carpenter

2017-2018

- · Built sets for advertising photography
- Painted and finished sets
- · Maintained power tools

Skills

Software & Design

- 3D CAD with Autodesk, Vectorworks, and Revit
- DMX, sACN, Art-net, OSC, and WS2811 control protocols
- Python, C++, HTML, CSS, lua, JavaScript and bash
- Network installation, configuration, and troubleshooting
- · Audio system design, installation, and repair
- Graphic design tools incl. Illustrator and Photoshop
- Physical computing: Sensors, motors, and lighting control

Miscellany

• Well versed in medieval Scottish history

Hardware

- Microprocessors and single board computers (Teensy, Arduino, Raspberry pi)
- Circuit design
- Soldering and small electronics repair
- High and low voltage power distribution
- · Low-level bluetooth and serial communication

Space & Equipment

- · Operation of scissorlifts and hydraulic work platforms
- Structural Rigging
- Trained with fall arrest equipment and comfortable with heights