

Angelica Gutierrez

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Professional Summary

Electrical engineer and USAF veteran leveraging nine years of expertise in electrical principles and standards. Proven success in managing small to medium-scale projects for the Department of Defense and Department of Energy. Currently pursuing further education and committed to continuous learning. Seeking opportunities to broaden knowledge, drive innovation, and contribute to technological advancement and company success.

General Skills

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| ▪ Time management and organization | ▪ Written and verbal communication |
| ▪ Leadership and collaboration | ▪ Documentation and report generation |
| ▪ Attention to detail and quality assurance | ▪ Mathematical and analytical computations |
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Technical Skills

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| ▪ Schematic Design Tools Proficiency
AutoCAD Electrical and Altium | ▪ Electrical Publications and Safety Compliance
NEC, NFPA (70, 70E, 72, 101), IBC, IEEE, ANSI, OSHA30 |
| ▪ Schematic Testing and Power Flow Simulation
LTspice, TINA-TI, and Power World | ▪ Arc Flash Safety and Lockout/Tagout Procedures |
| ▪ Troubleshooting and circuit analysis | ▪ Microsoft Suite: Word, Excel, PowerPoint, and Project |
| | ▪ Programming Languages: C, C++, and MATLAB |
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Professional Experience

Electrical Engineer Associate II

June 2025 – Present

Navarro-ATL, Hanford Site – Richland, WA

- Supports the 222-S Analytical Laboratory for the Hanford Waste Treatment Plant cleanup project, provides engineering support for aging infrastructure through strategic upgrades and new equipment installations.
- Works closely with electricians and field supervisors to plan and coordinate electrical work efficiently, ensuring safety, compliance, and minimal disruption to laboratory operations.
- Prepares Electrical Risk Assessments (ERAs) establishing safe work conditions prior to project execution; develops and processes Engineering Change Notices (ECNs) for new installations and upgrades.
- Performs detailed electrical calculations, consolidates engineering drawings, and updates one-lines and schematics in AutoCAD; issue Drawing Change Notices (DCNs) to accurately reflect as-built field conditions.

Facility Engineering & Maintenance Intern

Feb 2022 – Sept 2025

Pacific Northwest National Laboratory, PNNL – Richland, WA

- Improved facility engineering operations through comprehensive engineering analyses, ensuring the continuous and reliable operation of all building systems to support user research.
- Shadowed and assisted Professional Engineers (PEs) during redlining processes, drawing set design crucial to project implementation, and resolution of emergent facility and equipment issues.
- Assisted in the development of preventative and corrective maintenance strategies, including asset and equipment database maintenance, configuration management, and procedural writing.
- Utilized AutoCAD to design intermediate building system drawings, HV one-line diagrams, control systems, and lighting wiring diagrams while adhering to technical specifications and industry standards.

Electrical Systems Specialist (3E051)

Jul 2016 – Feb 2022

United States Air Force, USAF – Shaw AFB, Sumter, SC

- Supervised a 5 personnel team as Fire Alarm Shop Foreman, directed inspections, maintenance and installs on 78 miles of high-voltage distribution, medium voltage distribution, fire protection and antenna systems spanning 247 base facilities.

- Installed and repaired low- to high-voltage distribution, airfield lighting and fire alarms; read schematics to execute wiring layouts and quickly troubleshoot complex issues under time-critical conditions.
- Trained new personnel in equipment operation, tool proficiency, asset management and emergency-management systems while ensuring safe use of specialized tools and prompt response to emergencies.
- Managed building assessments, project planning, estimating, contractor coordination and a \$3.4 million preventive-maintenance program with 14,000 tasks sustaining base electrical infrastructure and mission readiness.

Work Accomplishments

Army Headquarters Fire Alarm System Upgrade

2019

United States Air Force, USAF – Sumter, SC

- Directed the ARCENT Third Army Headquarters fire alarm system upgrade. Effectively planned and executed the installation of 15 notification appliance circuit power booster panels. Diagnosed and resolved complex troubles and discrepancies in multiple fire alarm control panels spanning a 25,000 sq ft facility. Overall, enhanced the fire protection system of a valued \$106 million-dollar establishment, resulting in heightened safety measures benefiting 6,800 personnel.

Kingpin C4I AHU Testing Station Install

2020

United States Air Force, USAF – Abu Dhabi, UAE

- Planned and executed the time-sensitive installation of power capabilities for the USAF King Pin HVAC system testing station. This involved conducting meticulous tasks such as power assessment, wire sizing, load analysis, engineering of disconnect mounts, and rigorous performance testing to ensure the successful installation of 50 feet of high-voltage (HV) cable and 60-amp disconnects for HVAC test terminals. These efforts contributed critical support to the \$193 million-dollar command, control, communications, computers, and intelligence (C4I) hub.

EMSL Emergency Lighting Upgrade

2023 – 2025

Environmental Molecular Science Laboratory, PNNL – Richland, WA

- Engineered and implemented the upgrade for laboratory emergency lighting, introduced an advanced automated inverter system for real-time monitoring of fixtures, circuit loads, and battery life. Conducted lighting load calculations, oversaw system maintenance software, and revised preventative maintenance procedures and organizational standards. Achieved a remarkable 90% reduction in manual maintenance time and improved safety protocols, reducing critical response time within a sprawling 200,000 sq ft research facility, ensuring unparalleled efficiency and reliability.
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Education

Bachelor of Science in Electrical Engineering, Specialization in Linear Systems, GPA 3.64

May 2024

Focus Areas: Control Systems, Signal Processing, Distributed Parameters, RF Telecommunications

Washington State University Tri-Cities, Richland, WA

Associate of Science in Electrical & Mechanical Technology, GPA 3.80

Dec 2019

Air University, Montgomery, AL

Career Diploma in AutoCAD Drafting (In progress)

Exp. 2025

Penn Foster Career School, Scranton, PA

Master of Science in Electrical Engineering (In progress)

Exp. 2025

Washington State University Tri-Cities, Richland, WA