

# Luis Ortega

Los Angeles, CA

-Email me on Indeed: <http://www.indeed.com/r/Luis-Ortega/fb6e5218a377b6af>

Passionate and enthusiastic electrical engineering graduate from CSU Fresno with practical experience in both a manufacturing and laboratory environment, and technical knowledge in power electronics and control systems. Skilled in PCB design, DC/DC & AC/DC converter design, PWM controllers, and electrical schematic design/capture methods. Experienced with languages such as Python, Embedded C, C#, PIC Assembly and PLC ladder logic programming for machine automation and data processing.

Authorized to work in the US for any employer

## Work Experience

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### **Electrical Engineer**

Zinex Corporation - Oxnard, CA

July 2020 to Present

- Worked in a small team designing and manufacturing high powered three-phase AC/DC rectifiers for use in industrial environments such as metal plating or water treatment facilities.
- Hand-wired machine control panels and cable harnesses up to IECEx Zone 2 Specifications.
- Performed in-depth electrical acceptance testing of completed machines, such as short circuit and high-potential isolation testing.
- Created electrical schematics and rectifier control PCBAs using EagleCAD design software.
- Prepared and maintained bills of materials and independently sourced electronic components for use in production.
- Balanced several independent prototyping, hardware, and software design projects.
- Provided technical phone support and repair services on machines at customer sites.

### **Reliability Technician**

Skyworks Solutions - Newbury Park, CA

March 2020 to July 2020

- Performed a variety of RF and DC stress analysis on various production samples of packaged devices and LTMs (life-time modules) in controlled cleanroom.
- Monitored strength, clarity and reliability of incoming and outgoing signals and adjust equipment and software as necessary to maintain device integrity.
- Organized and compiled test results for quality control analysis by production engineers.
- Obtained practical experience in a professional manufacturing environment and garnered useful skills in troubleshooting and debugging technical issues in both hardware and software.

### **Undergraduate Researcher**

California State University of Fresno - Fresno, CA

September 2018 to August 2019

- Led a university-funded research project into solar energy harvesting and with a focus on improving battery charging methods. Managed purchases of necessary lab equipment and electrical components using grants issued to the university by DPS Telecom and the National Science Foundation (NSF).

- Designed DC/DC converter circuits utilizing digital and analog feed-back control systems to implement constant current/constant voltage (CC/CV) and maximum power point tracking (MPPT) control algorithms.
- Tested and debugged digital and analog circuits using lab equipment such as oscilloscopes and function generators. Created daily testing procedures to further improve the performance of the system in design.

## Education

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### **B.S. in Electrical Engineering**

California State University

## Skills

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- EagleCAD
- MATLAB
- Spanish
- Git
- Agile
- Microsoft Office (10+ years)
- Mac OS (4 years)
- Linux (2 years)
- PCB Design (3 years)
- Analog Electronics (2 years)
- FMEA (1 year)
- Project management (2 years)
- Simulink
- Python
- Debugging
- Microsoft Outlook
- Manufacturing
- Stress analysis
- Laboratory experience
- Assembly
- Quality control
- Software troubleshooting
- Organizational skills
- Programmable logic controllers
- Research
- Windows
- Assembly
- PSpice

- Digital Electronics
- KiCAD
- Microsoft Office
- LTSpice
- Raspberry Pi (1 year)
- Problem-solving
- C# (Less than 1 year)
- C++
- C

## Languages

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- English - Expert
- Spanish - Fluent

## Links

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<https://www.linkedin.com/in/luismortega/>

## Certifications and Licenses

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### **Engineer In Training**

Present

## Assessments

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### **Problem solving — Expert**

December 2019

Analyzing relevant information when solving problems.

Full results: [Expert](#)

### **Attention to detail — Highly Proficient**

July 2021

Identifying differences in materials, following instructions, and detecting details among distracting information.

Full results: [Highly Proficient](#)

### **Analyzing data — Expert**

December 2019

Interpreting and producing graphs, identifying trends, and drawing justifiable conclusions from data.

Full results: [Expert](#)

### **Research — Highly Proficient**

December 2019

Following protocols, interpreting statistics and graphs, identifying errors, and choosing research methodology.

Full results: [Highly Proficient](#)

Indeed Assessments provides skills tests that are not indicative of a license or certification, or continued development in any professional field.