

John Le

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SUMMARY

Results-driven engineering professional with a robust background in electrical engineering and RF communications. Proficient in Python, C#, Linux, and adept at troubleshooting digital printed circuit boards. Committed to ensuring product reliability, optimizing manufacturing processes, and driving engineering excellence. Dedicated to innovative solutions that meet the highest quality standards in electrical engineering while leveraging technical expertise to contribute effectively to engineering projects.

EDUCATION

DeVry College of New York
B.S. in Engineering Technology

Jan. 2022 – Present

Monroe Community College, Rochester, NY
A.A.S. in Electrical Engineering Technology

Aug. 2018 – May 2021

EXPERIENCE

UTC Retail, Rochester, NY
Engineering Technician

Sept. 2023 – Present

- Developed meticulous documentation, making complex processes accessible even to untrained individuals. This resulted in remarkable efficiency gains and near-error-free execution.
- Led the creation of in-house software solutions in Python and C# that drove a seamless transition from antiquated systems to state-of-the-art methodologies, optimizing operations.
- Proficiently diagnosed and resolved point of sale system issues, systematically assessing warranty statuses, meticulously analyzing failure trends, and orchestrating swift, data-driven decisions on product repairs or in-house solutions.
- Collaborated seamlessly with cross-functional teams to maintain a proactive, efficient channel of communication with suppliers. This facilitated discussions on recurring failures, data-rich diagnostic insight sharing, and feedback incorporation into product designs to meet evolving client requirements.
- Spearheaded BIOS testing and validation initiatives, delivering insightful feedback to fine-tune point of sale systems for peak performance. Expertly harnessed the power of Windows Pre-Installation Environment (WinPE) to capture and customize gold images according to precise customer specifications.
- Innovatively designed and developed automated recovery utilities alongside user-friendly instructions. These resources empowered customers to independently restore systems to their gold image with unparalleled ease, reducing downtime and enhancing customer satisfaction.
- Played a pivotal role in ensuring rigorous validation of engineering designs and drawings, ensuring unwavering adherence to the highest quality standards.
- Spearheaded the creation of meticulously detailed in-house engineering documentation for upcoming product lines. This invaluable resource streamlined transitions to cutting-edge technologies, fostering peak organizational efficiency.
- Validate that the performance of prospective PCBs is consistent with customer requirements through rigorous evaluation and testing.
- Analyze PCB designs of similar solutions to identify alternative components that meet performance and reliability requirements while reducing cost.
- Engineered and constructed custom cable assemblies to validate the performance and feasibility of innovative solutions to customer requirements.

L3Harris Technologies, Rochester, NY
Manufacturing Technician B

Jan. 2020 – Sept. 2023
May 2021 – Sept. 2023

- Diligently and meticulously troubleshoot thousands of RF communication systems valued at \$10M, significantly enhancing product reliability and generating significant cost savings.
- Employed efficient troubleshooting techniques to diagnose and resolve complex issues contributing to a resolution rate of over 90% on various L3Harris systems, ensuring optimal product quality and reducing waste.
- Utilized electrical engineering expertise to reverse engineer and diagnose defects of printed circuit boards. Coordinated with interagency departments to correct issues, which aided in preventing design flaws.
- Actively resolved real-time assembly and manufacturing failures, utilizing advanced tools like oscilloscopes and analyzers. These interventions minimized downtime, prevented delays, and eliminated unnecessary disruptions.
- Orchestrated seamless cross-team communications among design engineers, test engineers, quality engineers, operational management, and fellow troubleshoot technicians to ensure collaborative synergy throughout the production cycle.
- Spearheaded and executed 17 E3 projects aimed at optimizing job efficiency, augmenting test yield, mitigating failures, and capturing valuable tribal knowledge to facilitate a streamlined and highly effective training process.
- Played a pivotal role in 7 E3 initiatives, actively contributing to the formulation and implementation of the company's engineering ideals, fostering continuous improvement across the organization.
- Conducted thorough training sessions for multiple newly recruited Manufacturing Technician A, offering detailed instruction on a diverse range of test fixtures. The training focused on building their proficiency in equipment operation and interpretation of test results. By providing comprehensive knowledge and practical skills, the technicians were equipped to perform complex testing procedures with confidence, ensuring accurate and efficient outcomes.
- Developed a specialized training process for a Manufacturing Technician A, focusing on electronic troubleshooting techniques, precise measurements, and efficient triage methods. This program enabled their promotion to Manufacturing Technician B within 12 months.
- Created and maintained detailed technical documentation, capturing essential measurements, functions, and programs for troubleshooting. This centralized knowledge base ensures standardized practices and supports efficient workflows.
- Introduced innovative solutions tailored to specific challenges, such as a triage process to quickly identify false failures. This approach streamlined troubleshooting and reduced diagnostic time.

Manufacturing Technician A
May 2021

Jan. 2020 –

- Electrical technician responsible for testing and entry-level troubleshooting of multiple RF communication systems worth a total of \$4.5M ensuring product reliability, resulting in saving approximately \$225K.
- Worked with engineering teams to audit the functionality of five separate telecommunication systems. Elicited input and performed Root Cause Analysis (RCA) to identify and correct issues in the manufacturing process.

MCC Engineering Tech Learning Center, Rochester, NY
Student Aide

Oct 2018 – Jun 2020

- Provided expert assistance and tutelage to fellow students, imparting in-depth knowledge in subjects such as Introduction to Digital Electronics, AC/DC Circuit Analysis, and Linear Circuits, resulting in notable academic achievements.

- Facilitated an optimal learning environment by maintaining the cleanliness, organization, and functionality of the facility, ensuring a conducive space for student collaboration and experimentation.

SKILLS

- Electrical Engineering: Proficient in RF, Circuit Design, and Digital Systems.
- Programming: Skilled in Python and C#.
- Operating Systems: Familiar with Linux.
- Tools: Experienced in Soldering, PCB Troubleshooting, and equipment like Oscilloscope and Multimeter.
- Software: Proficient in using software such as Visio, Multisim, and LabVIEW.
- Telecommunications: Knowledgeable in RF, Networking Protocols, and Ethernet systems.
- Documentation: Capable of creating comprehensive documentation.
- In-House Solutions: Experienced in in-house software development and troubleshooting.
- Communication: Effective communication within cross-functional teams and with suppliers.
- Point of Sale Systems: Skilled in diagnosis, Root Cause Analysis (RCA), and warranty analysis.
- BIOS Optimization: Proficient in BIOS testing, validation, and feedback.
- Image Management: Skilled in using WinPE for image capture and modification.
- Automation: Design and development of automated recovery utilities.
- Engineering Validation: Ensuring rigorous validation of engineering designs and drawings.
- Documentation Management: Creating detailed engineering documentation for new product lines.

EXTRACURRICULAR

Institute of Electrical and Electronics Engineers	<i>Member since Dec. 2021</i>
National Society of Professional Engineers	<i>Member since May 2021</i>
Engineering Leadership Council, Monroe Community College	<i>Sep. 2019 – May 2021</i>