

Paul David Lozano - Licensed Electrical Engineer
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Professional Summary

Licensed Electrical Engineer with proven expertise in PCB hardware design and development, specializing in complex multi-layer boards up to 100 layers with controlled impedance requirements. Combines deep hardware engineering knowledge with programming capabilities in Python and JavaScript to create innovative solutions and automation tools. Demonstrated experience in design, stackup optimization, and cross-functional collaboration. Actively maintains current expertise in semiconductor industry trends through technical publications and research, with a strong foundation in systematic problem-solving and experimental methodologies. Currently pursuing Master's in Engineering while contributing to knowledge-sharing initiatives and team development.

Technical Skills

Hardware Design: PCB Layout, Stackup Design, Component Selection, Impedance Control

Tools & Technologies: Cadence Allegro, Machine Learning

Programming Languages: Python, JavaScript, Bash

Professional Experience

Hardware Engineer | DIS Tech Philippines (Oct 2023 - Present)

- **Designed multiple PCB tester solutions from start to finish** in Cadence's Allegro including high current boards reaching up to 100 layers
- **Architected custom stackup configurations** for controlled impedance requirements (50Ω single-ended, 90Ω/100Ω differential) while balancing cost and performance across various substrate materials
- **Engineered Python and JavaScript tools** that significantly accelerated workflow and elevated output quality, with comprehensive documentation for team adoption
- **Mentored 8 engineers** on technical processes and tool implementation, enhancing team productivity
- **Actively presented to weekly knowledge sharing sessions**, presenting on various technical topics such as Stackups
- **Maintained engineering expertise** through regular engagement in technical literature and publications like SemiWiki and IEEE Spectrum
- **Engaged in feasibility discussions with other engineers** on a difficult project

Junior Data Analyst | NextPay (Feb 2023 - Aug 2023)

- **Built multiple dashboards** using PostgreSQL queries in Metabase and PostHog for data-driven decision making
- **Developed comprehensive data dictionary** improving data accessibility across the organization
- **Produced and presented weekly video updates** on the company's status, providing clear context and fostering transparent communication within the team.

Education

Master of Engineering in Electronics Engineering | Mapua University (2025-2027)

Bachelor of Science in Electrical Engineering | Mapua University (2019-2023)