

MAXWELL VOLZ

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QUALIFICATIONS

- **Senior Software Engineer:** Accomplished engineer with 10+ years of experience developing modern applications, specializing in Python for scalable testing frameworks focusing on hardware systems.
- **Project Leadership & Collaboration:** Proven ability to lead cross-functional teams and manage end-to-end project lifecycles, working closely with hardware and software engineers to design robust testing methodologies and ensure seamless integration.
- **Delivery & Technical Expertise:** Expert in automation development with advanced proficiency in Linux, CLIs, version control, databases, and the latest development tools and technologies. Skilled in serial/socket programming for embedded systems, RF systems, and modern web frameworks.

PROFESSIONAL EXPERIENCE

PRINCIPAL ENGINEER, AR/VR AUTOMATION 2022 - Present LTTS @ Meta - Sunnyvale, CA

- Led the design and automation of test procedures for real-time AR/VR performance monitoring, streamlining data integration and operational workflows across teams.
- Optimized software-hardware integration to enhance system performance and introduced cutting-edge tools to expand prototype testing capabilities.
- Expanded framework capabilities to support low-level kernel tracing with Perfetto for detailed CPU and GPU performance analysis.
- Reduced time to data visualization by leveraging Python multithreading for efficient data aggregation from advanced measurement devices. Modernized a legacy codebase for compatibility with new platforms, improving adaptability and efficiency.
- Standardized data analysis algorithms with a focus on precise event capture using edge detection, while mentoring team members and producing comprehensive documentation to support new technologies and processes.

PRINCIPAL ENGINEER, DEVICE VERIFICATION 2019 - 2022 LTTS @ Meta - Menlo Park, CA

- Designed and automated comprehensive test procedures to streamline Device Verification Testing (DVT) for phased array antennas.
- Authored critical design documentation defining evaluation criteria, and led spectrum analysis initiatives for Terragraph's mesh network deployment.
- Fostered strong collaboration with remote teams to implement advanced technical testing methodologies and conducted extensive training in Taiwan, reducing failure rates by 50% through skill development and process optimization.
- Played a key role in verifying product performance and enhancing the efficiency of Terragraph's manufacturing and deployment workflows.

FULL STACK DEVELOPER 2018 - 2019

Esencia Tech @ Facebook - Menlo Park, CA

- Developed a full-stack application for the High Altitude Platform Station (HAPS) system, enabling live monitoring and optimization of mobile backhaul solutions on 26GHz and 38GHz bands.
- Transformed a hardware-centric product into a comprehensive software solution by integrating data capture, aggregation, and visualization, creating an interactive interface for robust analysis and strategic decision-making.
- Ensured consistency in software stack and GUI across all phases of research, development, testing, and demonstrations, culminating in a successful live demonstration of the TerraZed system in Oudtshoorn, South Africa. This showcased its capabilities to stakeholders, directly contributing to its acquisition by SoftBank and its smooth transition to an OEM partner.

WEB APPLICATION DEVELOPER 2017 - 2018

Delta Dental - San Francisco, CA

- Developed and maintained client-facing websites for high-profile clients, optimizing usability and performance.
- Improved internal communication and efficiency by managing and upgrading employee portals.