MAXWELL VOLZ

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SUMMARY OF QUALIFICATIONS

- **Senior-level engineer**: Senior-level engineer and effective team leader with over 10 years of experience in developing modern applications and leading cross-functional engineering teams, specializing in Python.
- **Track record delivering reliable software**: Demonstrated history of delivering resilient and reliable software, emphasizing scalability, efficiency, and robustness.
- **Project Ownership**: Skilled in navigating projects from the ground up, ensuring comprehensive management, strategic direction, and adherence to goals throughout all phases.
- **Delivery and Impact**: Excels in executing projects to completion within deadlines, fostering innovation and operational improvements across the board.
- **Technical Proficiency**: Expert in Python development, with extensive knowledge of modern web frameworks, data analysis, and system architecture. Experience with Linux, CLIs, version control, Javascript, React, SQL, NoSQL, reading schematics and data sheets, serial and socket programming for interfacing with embedded software.

PROFESSIONAL EXPERIENCE

PRINCIPAL ENGINEER, AR/VR AUTOMATION 2022 - Present   **LTTS @ Meta - Sunnyvale, CA**
- Led the design and development of an automated dashboard for real-time AR/VR system performance monitoring, coordinating with multiple teams to enhance data integration and operational efficiency.
- Coordinated with hardware teams to optimize software solutions, ensuring seamless integration and enhancing system performance, directly supporting enterprise hardware design and release processes.
- Pioneered the use of new technologies to expand device prototype testing capabilities, incorporating networked filesystems, databases, and advanced data visualization tools.
- Achieved a 96% reduction in time to data visualization by optimizing data aggregation processes from cutting-edge lab measurement devices, utilizing modern Python multithreading techniques.
- Undertook a comprehensive refactor of the legacy codebase, enabling the integration of prior engineering work onto new platforms, enhancing system efficiency and adaptability.
- Enhanced framework capabilities to support low-level kernel tracing with Perfetto, facilitating detailed per-core CPU and GPU performance analysis.
- Led a collaborative effort to standardize data analysis algorithms, focusing on the precision of event capture through advanced edge detection techniques.
- Created and maintained comprehensive documentation for new procedures, facilitating the adoption of new technologies and improving process efficiencies across teams.
- Mentored new team members, guiding them through project onboarding and implementation processes to enhance team capability and ensure project continuity.

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

- Devised and implemented comprehensive test procedures to streamline Device Verification Testing (DVT) for manufacturers, ensuring the rigorous assessment of product performance and reliability.
- Played a pivotal role in drafting the design document crucial for the DVT process, outlining criteria for evaluating product performance at different assembly stages.
- Fostered and maintained critical relationships with the remote team, enhancing the implementation of technical and spectrum analyses for the testing of state-of-the-art phased array antennas, crucial for Terragraph's mesh network deployment.
- Led the automation of test procedures and was instrumental in verifying the performance of shipped products, contributing significantly to the efficiency and reliability of Terragraph's deployment.
- Directed and conducted extensive training sessions in Taiwan, equipping teams with the necessary skills and knowledge to efficiently execute DVT and qualify product performance accurately at various assembly stages, resulting in a 50% reduction in the expected failure rate.

FULL STACK DEVELOPER 2018 - 2019   **Esencia Tech @ Facebook - Menlo Park, CA**

- Developed a full-stack application for the High Altitude Platform Station (HAPS) system, which played a crucial role in live monitoring and optimizing mobile backhaul solutions on the 26GHz and 38GHz bands. This application demonstrated the system's effectiveness and supported its operational success.
- Led the transformation of a hardware-focused product into a comprehensive software solution by integrating data capture, aggregation, and visualization processes. This initiative resulted in a dynamic and interactive interface for robust data analysis and strategic decision-making, enhancing the product's market readiness.
- Maintained a consistent software stack and GUI throughout the research, development, testing, and demonstration phases, ensuring seamless system interaction for internal teams and key stakeholders.
- Directed a highly successful live demonstration of the TerraZed system on an airfield in Oudtshoorn, South Africa. This event significantly showcased the system's capabilities to key stakeholders, contributing to the project's acquisition by SoftBank.
- Facilitated the handoff of the Terragraph project to an OEM partner, ensuring a smooth transition and sustained project success under new stewardship.

WEB APPLICATION DEVELOPER 2017 - 2018   **Delta Dental - San Francisco, CA**

- Led development and maintenance of client-facing websites, ensuring high usability and performance for high-profile clientele.
- Managed and updated employee portals, enhancing internal communications and operational efficiency.

SOFTWARE ENGINEER 2015 - 2016   **Advisor Software - Walnut Creek, CA**

- Developed financial planning applications for multiple platforms, integrating various services with an emphasis on utilizing Agile methodologies for efficient workflow and collaboration.