Kevin Liedtke

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SOFTWARE ENGINEER AND ARCHITECT

- 20+ years building software, shaping architecture and requirements from UI to middleware to firmware.
- Led UX design for Intel's entire wired Ethernet software portfolio, architecting solutions that improved usability across customer-facing products and internal engineering tools.
- Aligned cross-discipline teams and VP stakeholders to balance user needs with technical constraints.
- Mentored engineers on architecture, debugging, career growth, and soft skills, leading to faster ramp-up and stronger technical collaboration across teams.
- Designed and implemented the self-help and unified knowledgebase platform within Intel's Labs-as-a-Service initiative, accelerating provisioning and reducing support load across a 1,000+ person org.

TECHNICAL SKILLS

Programming Languages: C++, Python, C#, .NET, PowerShell, SQL, Java, JavaScript, TypeScript

Web Technologies: JSON, RESTful APIs, Node.js, React, Next.JS

Databases: SQL Server, PostgreSQL, MySQL **Operating Systems:** Windows, Linux

Networking: TCP, UDP, IP networking, routing, switching, DNS, DHCP, ARP, error detection and recovery

Tools: Git, Github, Docker, VS Code, Visual Studio, Jira, Figma, Fusion 360, Adobe Photoshop

Processes: Design Thinking, Agile Methodology, Scrum, Automated Testing

CORE COMPETENCIES

Technical Leadership | Mentorship & Team Development | Cross-Functional Partnership | Design-Engineering Collaboration Full-Stack & Multi-Platform Development | API & Tooling Development | Software Architecture | Workflow Automation User Experience (UX) Design & Strategy | Prototyping | User Story Creation | Human Factors Engineering | Usability Process Improvement & Optimization | Continuous Improvement | Lifecycle Management | Data-Driven Decision Making Requirements Gathering | Documentation | Data Analysis | Innovation & Ideation | Strong Communication

PROFESSIONAL EXPERIENCE

INTEL CORPORATION, Hillsboro, OR

2005 - 2024

Senior Systems Software Architect, March 2022 – September 2024 - Remote

Directed architectural strategy in collaboration with Principal Engineers, driving initiatives that improved system reliability and user experience. Influenced executive-level decision-making through data-backed proposals.

- Reduced driver triage time by 30% and maintenance by 25% through automated validation using Python, C#, and SQL tools that embedded metadata for version and device traceability.
- Led process improvements in four cross-organization global divisions, driving product development efficiencies and reducing resource waste by 15%.
- Streamlined requirements review process reducing review time by 50% and improving SLA compliance by 45% through custom automation for SLA miss detection and enforcement.
- Analyzed process and usage data to identify inefficiencies; presented recommendations at a global manager summit leading to increasing engineering engagement by 200%.
- Created onboarding resources to accelerate ramp-up and preserve key team knowledge.
- Collaborated daily with cross-disciplinary teams to identify architectural challenges and define strategic solutions from firmware interfaces to end user interfaces.
- Mentored senior engineers on coding practices, design principles, and career growth.

Senior Human Factors Engineer, June 2012 – March 2022

Led UX architecture and strategy across Intel's wired Ethernet software stack, serving as the sole Human Factors Engineer for a 1,000+ person organization. Drove user-centered design across GUIs, APIs, and command-line tools used by network administrators worldwide ensuring consistency, accessibility, and alignment from requirements through deployment.

- Integrated UX principles into early hardware and software requirements to drive consistency, usability, and stakeholder alignment across platforms.
- Cut iteration cycles by 30-40% by prototyping UI workflows in Figma and C#, accelerating design feedback and validation.
- Reduced support tickets by 20% and resolution time by 15% by developing a centralized debug and documentation hub
 used by multiple organizations.
- Created and led a UX team in Poland to deliver continuous design coverage and faster turnaround across global teams.
- Conducted innovation workshops and patent training, generating dozens of IP submissions.
- Influenced \$50M+ in product retirement decisions as software organization representative on the End-of-Life committee.
- Advocated for design standards and ensured compliance with branding, accessibility, and DEI guidelines across software interfaces, documentation, and workflows.
- Mentored engineers on career growth, collaboration, navigating corporate challenges, and coding practices.

Network Software Engineer, August 2005 – June 2012

Delivered full stack software for Intel's wired networking tools across 40+ successful releases, contributing to over \$1B in product revenue. Developed and maintained core components spanning installers, UIs, middleware, and backend layers using C++, C#, PowerShell, and scripting frameworks.

- Developed and owned key components bridging hardware and software in Three-Tier and Event-Driven Architectures.
- Optimized C++ middleware and WMI services to improve performance and integration with hardware layers.
- Built frontend UIs in C#, C++, WTL/ATL, and VBScript for configuration tools across Windows environments.
- Managed a \$250K translation budget and served as primary liaison to Intel's globalization and localization teams.

ADDITIONAL EXPERIENCE

Personal Projects

- Engineered a Node.js module with an HTML/CSS/JavaScript front-end for MagicMirror.
- Developed a Python-based Discord bot for stock and cryptocurrency data retrieval.
- Created an open-source OctoPrint plugin using Python and Jinja to interface with custom thermal sensor.
- Wrote a responsive portfolio site using Next.js, Tailwind CSS, and TypeScript.

EDUCATION

Bachelor of Science (BS) in Computer Science; Minor in Business Administration OREGON STATE UNIVERSITY, Corvallis, OR

AWARDS & RECOGNITION

Intel Technical Lead - Awarded April 2020

Recognized by Intel's Principal Engineer committee for demonstrated impact in technical leadership, innovation, strategy, and mentoring. Selection based on contributions to UX and Human Factors Engineering across Intel's software division.

PATENTS

Granted

- US-12001826-B2 Device Firmware Update Techniques
- US-12254304B2 Firmware update techniques

Pending

- US-20230124192-A1 Heating and Cooling Systems for Edge Data Centers
- US-20220114011-A1 Methods and Apparatus for Network Interface Device-Based Edge Computing
- US-20210041929-A1 Dynamic Network Controller Power Management
- US-20200322287-A1 Switch-Managed Resource Allocation and Software Execution
- US-20200177660-A1 Offload of Streaming Protocol Packet Formation