

SUMMARY

Accomplished software engineering leader with 17 years of experience architecting innovative solutions and guiding high-performing teams to success. Deep expertise in C/C++, Objective-C, and Swift, with a strong track record of delivering reliable, scalable applications that meet complex business needs. Recognized for fostering cross-functional collaboration, mentoring talent, and driving technical excellence in fast-paced, evolving environments. Passionate about continuous learning and leveraging emerging technologies to create forward-thinking software products. Strong advocate of using telemetry, testing, and real-world metrics as continuous feedback to refine, validate, and iterate on better designs.

SKILLS

C / C++

Swift

Git

Leadership and Teamwork

Objective-C

Apple Frameworks

Systems and Application Development

Mentoring

EMPLOYMENT HISTORY

Principal Software Engineer, Microsoft

JUNE 2015 – PRESENT

Microsoft Defender for macOS

Microsoft Defender for macOS is an enterprise-grade endpoint protection solution that detects and blocks threats on Apple devices.

Responsibilities:

- Architected key components of the macOS endpoint protection client, including the system extension-based sensor framework responsible for real-time file, process, and network monitoring.
- Designed and maintained cross-platform security libraries powering core functionality across Windows, macOS, and Linux—such as the update delivery pipeline and VPN stack.
- Drove performance optimization and deep system integration for Apple silicon, ensuring minimal resource impact and native responsiveness.

Achievements:

- Reduced CPU and memory consumption by approximately 15% through telemetry-guided architectural refactors and custom-tailored solutions for enterprise customer environments.
- Increased detection precision by analyzing real-world sensor output, refining detection rules, and enhancing signal processing pipelines to reduce false positives.
- Contributed to improving client stability and performance KPIs across Fortune 500 Mac fleets by resolving platform-specific bottlenecks and deploying system-aware fixes.

BuildXL

Open-source, distributed build engine designed to accelerate large-scale, incremental builds across massive monorepos—running tens of thousands of builds per day and handling caches, dependencies, and execution across many machines.

Responsibilities:

- Ported BuildXL's Windows-only C# engine to macOS, including file tracking and full process sandboxing (via custom kernel extension).
- Designed deterministic caching, scheduling, and graph traversal for large-scale builds to create deterministic build environments.
- Benchmarked system performance and utilization to ensure consistent behavior across platforms and scenarios.

Achievements:

- Cut Office for macOS build times by 30% for clean builds, and ensured almost instant iteration times for engineers building features through leveraging cloud nodes.
- Enabled BuildXL adoption on macOS for hundreds of developers across Microsoft teams.
- Improved cross-platform consistency with a unified sandbox abstraction layer that later was used on Linux too.
- Huge cost reduction in build system infrastructure and increased engineering productivity.

Microsoft To Do

Free, cloud-based task management app from Microsoft that helps you organize and track tasks across devices and integrates seamlessly with Outlook and the legacy Wunderlist experience.

Responsibilities:

- Implemented core integration of Wunderlist into Microsoft 365 and Exchange infrastructure post-acquisition.
- Migrated sync logic and task models to support enterprise-scale data flows in the Exchange ecosystem.

Achievements:

- Migrated over 10M user accounts and tasks with 99.9% data integrity during transition.

Senior Software Engineer, 6 Wunderkinder GmbH

FEBRUARY 2012 – MAY 2015

Wunderlist was a popular, now discontinued, cloud-based task management and to-do list app, originally developed by 6Wunderkinder in Berlin and later acquired by Microsoft—designed to let users create, share, and sync to-do lists across devices.

Responsibilities:

- Led a team of 5 engineers to deliver **Wunderlist** across iOS, macOS, and watchOS.
- Designed application architecture, UI flows, and distributed data syncing mechanism.
- Coordinated closely with designers and QA to ensure a cohesive cross-platform experience.

Achievements:

- Scaled the app to over 10M users globally; awarded Apple App of the Year.
- Increased user retention by 12% through A/B-tested UI/UX refinements.
- Built a high-performance sync engine, achieving reliable cross-device task consistency.

Software Engineer, Herus d.o.o.

JANUARY 2010 – FEBRUARY 2012

FullBusiness was a B2B one-stop solution providing companies with a turnkey webshop, IPTV advertising, and integrated sales platform.

Responsibilities:

- Developed a macOS-based video ingestion system using the major AV frameworks from Apple.
- Built a real-time compositor to inject dynamic overlays and metadata into IPTV streams.
- Optimized media processing for low-latency video transmission.

Achievements:

- Achieved broadcast-grade reliability.
- Delivered a fully integrated, hardware-optimized solution for on-premise deployment and content streaming.

INTERNSHIP

Software Engineer, Skytec AG, Munich

FEBRUARY 2007 – MAY 2009

Supported BMW during my internship by developing internal tools and analysis software for in-vehicle entertainment systems.

Responsibilities:

- Developed diagnostic and configuration tools in C/C++ for automotive systems.
- Debugging and automation of internal testing and quality insurance tools

Achievements:

- Reduced manual test time by half through development of a reusable utility framework.
- Incorporated user feedback into iterative tool improvements, increasing adoption.

EDUCATION

Computer Science, Masters, Ludwig Maximilian University of Munich, Munich

OCTOBER 2003 – MAY 2009

Master's degree in Computer Science with a focus on operating systems and application software development.

LANGUAGES

English

German

Croatian

OTHER

Passionate road cyclist with competitive racing experience

Extensive experience working and traveling in international and multicultural environments; enjoy discovering new cultures and languages.

Strong interest in humanitarian work and advancing social justice.