

Stephan Koglin-Fischer

Senior Fullstack Software Engineer &
Architect

stephan.koglin-fischer@funzt.dev

+4917615967320

www.funzt.dev

Kurt-Tucholsky-Straße 25, 06110, Halle
(Saale)

[GitHub](#) [LinkedIn](#) [Freelancermap](#) [Xing](#)

ABOUT

I deliver solutions: In me you have a strategic partner who comprehensively analyses, structures, and sustainably resolves technical challenges. With over 12 years of experience, I navigate purposefully and confidently between hardware, cloud, and complex data structures. My approach: Pragmatic. Tech-agnostic. Sustainable.

EXPERIENCE

[01/2021 – Present] **Fullstack Software Engineer, Solution Architect & AI Context Engineer**
funzt - Software Engineering

Independent software contractor delivering product engineering across industries including automotive, HR tech, e-commerce, and enterprise — working with clients ranging from startups to Siemens.

[10/2020 – 12/2022] **Senior Manager Frontend Developer**
Sixt Leasing (Allane SE)

Working on the migration from Angular to React for the sixt-neuwagen.de website, integrating Drupal CMS with GraphQL, and advocating for a monorepo structure.

[01/2020 – 09/2020] **Frontend Developer**
Relaxdays GmbH

Created a tool for the content team to support the retail platform, implemented UI/UX designs, contributed to PHP Laravel backend development, coached the team, optimized Scrum processes, supported DevOps in deploying applications to Kubernetes.

[01/2018 – 12/2019] **Product Manager**
Quapona Technologies GmbH

Evolved from technical lead into full product ownership — roadmap, stakeholder alignment, and cross-functional delivery.

[10/2014 – **Senior Software & Cloud Architect**

12/2018] **Quapona Technologies GmbH**

Joined as C/C++ firmware developer and progressed through iOS, cloud architecture, and software engineering to technical lead over four years at this IoT hardware startup.

[08/2013 – **Developer**

10/2014] **Sedenius Engineering GmbH**

Developed a high-performance data acquisition and replay system for ADAS software, addressing memory leak issues and ensuring system stability during prolonged operations.

EDUCATION

[01/2010 – **Master of Science Computer Visualistics**

01/2013] **Otto-von-Guericke University Magdeburg**

[01/2006 – **Bachelor of Science Computer Science**

01/2010] **Martin-Luther University Halle-Wittenberg**

LANGUAGES

German	Native speaker
English	Fluent
French	Basic

SKILLS

AI & Data Engineering · Expert

AWS Bedrock, LLM-Integration, RAG-Pipelines, Vector Stores, Context Engineering, Prompt Optimization, LangChain

Frontend & Interfaces · Expert

React, Vue, Astro, TypeScript, Nuxt 3, Next.js, Angular, Tailwind CSS, shadcn/vue, Ionic, Vite, Flutter

Mobile Development · Advanced

Android, Android Automotive OS, Kotlin, Jetpack Compose, iOS, Objective-C, Swift, Flutter, Dart, Java, HILT, Coroutines

DevOps & CI/CD · Expert

GitHub Actions, GitLab, GitLab Runner, GitLab CI/CD, Jenkins, Playwright, Cypress, Vitest, Jest, xUnit, Moq

Cloud & DevOps · Expert

AWS Lambda, AWS DynamoDB, AWS S3, AWS API Gateway, AWS CloudFormation, AWS CloudWatch, Terraform, Docker, Kubernetes, Docker Compose

Backend & Core · Expert

Python, Node.js, Go, C, C++, C#, PostgreSQL, Supabase, Firebase, Express.js, GraphQL, REST, drizzle-orm, Zod

Deep Tech & Embedded · Intermediate

Linux, Bluetooth, Qt, Atmel, ADTF, Unreal Engine 4

Project Management & Tools · Advanced

Scrum, Jira, Confluence, Visual Studio, Visual Studio Code, Git, GitHub, Bash, Shell, just, asdf, devenv, nix

PROJECTS

[02/2026 – **IT Management System v2**

Present] **Fullstack Developer**

Developed an IT management system with a data lake architecture and internal data management capabilities to create a full dynamic CRM-based web app.

- Architected a scalable data lake using Directus with PostgreSQL as the central repository for all customer and product data.
- Integrated Steampipe to virtualize external data sources (APIs, cloud services) as queryable database tables within the data model.
- Deployed and managed the entire infrastructure using Dokploy for container orchestration and cluster management.
- Designed a unified GraphQL API leveraging graphql-mesh to abstract both internal (Directus) and external (Steampipe) data sources.
- Implemented role-based access control (RBAC) and data governance policies across the data lake.
- Optimized database query performance through indexing strategies and connection pooling.
- Automated data synchronization and ETL processes between external systems and the central Directus repository.
- Created comprehensive data transformation pipelines to normalize and enrich external API data before storage.
- Established monitoring and alerting for data integrity, API availability, and cluster health using Dokploy dashboards.
- Enabled self-service data management capabilities for non-technical users through Directus' intuitive interface.

Stack: Directus, Steampipe, Dokploy, GraphQL, graphql-mesh, TypeScript, PostgreSQL, Postgres Foreign Data Wrappers, ETL, RBAC, Data Governance, GitHub Actions, Docker, Git, Shell, Docker Compose, Docker Stack, Docker Swarm, GitHub Copilot, OpenCode, OpenSpec, devenv, nix

[11/2024 – **HR Data Compliance App**

Present] **Senior Fullstack Developer**

Creation of the HR Data Compliance application from the ground up.

- Designed and developed the complete Fullstack application from the ground up, prioritizing future scalability, comprehensive testing, extensibility, and long-term maintainability.
- Established a streamlined management process enabling clients to efficiently administer the application and manage data with minimal complexity.
- Built a dynamic application capable of fetching external API data and validating compliance through customizable user scripts.
- Implemented a database-first architecture that serves as the single source of truth for both API and UI components, eliminating the need for redundant type definitions.
- Architected a model-driven, type-safe system ensuring robust maintenance workflows and seamless feature expansion.
- Created an intuitive user interface leveraging shadcn/vue components for optimal user experience.
- Implemented a comprehensive CI/CD pipeline encompassing automated testing, building, and deployment through GitHub Actions and Terraform/OpenTofu infrastructure management.

Stack: TypeScript, Astro, Vue, shadcn/vue, vee-validate, Zod, drizzle-orm, Tailwind CSS, Supabase, PostgreSQL, Vite, Playwright, Vitest, GitHub Actions, Terraform, Docker, devenv, nix, Git, Shell, Docker Compose, GitHub Copilot, OpenCode, OpenSpec, devenv, nix

[10/2025 – **Voicedrop Shopify Theme Extension**

02/2026] **Senior Fullstack Developer**

Creation of a Shopify Theme Extension to enable Voicedrop inside of Shopify Stores.

- Created the full Shopify Theme Extension of the Voicedrop product for Shopify.
- Automated QA including Unit and E2E Testing including visual regression tests to meet the requirements of the Shopify guidelines.
- Led the release of the extension through the Shopify review process and aligned the guidelines to the product.
- Created the Shopify Theme Extension with a Remix proxy to route to the original Voicedrop instances, reducing the need for a second software stack.
- Increased UI/UX of Voicedrop to fulfill the requirements of the Shopify Guidelines.

Stack: TypeScript, Liquid, Nuxt 3, Vue, DaisyUI, Supabase, PostgreSQL, Vite, Playwright, Storybook, Vitest, Shopify, GitHub Actions, devenv, nix, Git, Shell, GitHub Copilot, OpenCode, OpenSpec, devenv, nix

[04/2024 – **Siemens Internal References**

03/2025] **Senior Fullstack Developer**

Migration of Siemens internal references app from monolithic server to edge computing.

- Migration of monolithic legacy server code to AWS Lambda functions.
- Development of new features and bugfixes for the legacy codebase.
- Integration of AWS Lambda functions for the new features.
- Implemented backend logic using Express.js within AWS Lambda functions (TypeScript).
- Configured and maintained GitLab CI pipelines and custom GitLab Runners for automated testing and deployment.
- Performed IP/Network error analysis within the AWS VPC environment to ensure microservice connectivity.
- Created a reusable 'AI writing assistant and lecturer' component, which was adopted by the Siemens ecosystem.
- Increased performance of the Excel export feature from minutes to seconds.
- Minimal invasive implementation of new features into the legacy code.
- Added comprehensive testing for new and existing code using xUnit and Moq.

Stack: AWS Lambda, AWS S3, AWS Bedrock, AWS DynamoDB, AWS API Gateway, AWS CloudFormation, AWS CloudWatch, C#, TypeScript, React, Next.js, Express.js, LangChain, xUnit, Moq, Terraform, Docker, GitLab CI/CD, GitLab Runner, XML, XPath2, Context Engineering, LLM-Integration, Prompt Optimization, RAG-Pipelines, Vector Stores, REST, Git, Shell, Docker Compose, GitHub Copilot

[01/2021 – **IT Management System**

10/2024] **Fullstack Developer**

Developed an IT management system to streamline data management processes and improve functionality and reliability.

- Identified inefficiencies with Microsoft SharePoint for customer data management.
- Implemented Power Automate flow to automate fetching, processing, and integrating customer data into SharePoint lists.
- Addressed challenges like manual data entry, synchronization issues, and lack of scalability.
- Developed a customer replication using the views framework and GraphQL framework hosted on Cloudflare CI/CD pipelines.
- Utilized VueJS and Nuxt3 for web application development.
- Integrated continuous deployment into the GitHub repository using GitHub Actions.
- Created an OAS schema from the Atera API using graphql-mesh for a unified data schema in the web application.
- Streamlined data management processes.
- Freed up valuable time through automation.
- Established a unified data schema for accessing external third-party APIs in the web application.

Stack: Microsoft SharePoint, Power Automate, Vue, Nuxt 3, GraphQL, graphql-mesh, TypeScript, Supabase, PostgreSQL, GitHub Actions, Git, Shell, GitHub Copilot

[05/2022 – **Livil Flags App**
01/2024] **Senior Android Developer**

Message aggregation and assistant app for in-car and mobile usage.

- Spearheaded the development of the Livil Flags App's end-to-end encryption system for robust user privacy and security.
- Crafted a custom voice assistant, enabling seamless execution of complex tasks through natural voice commands, significantly enhancing user engagement.
- Designed an engaging user interface for both in-car and mobile app environments, leveraging Jetpack Compose for a streamlined and consistent user experience.
- Contributed significantly to the technical architecture, incorporating Kotlin with Coroutines, Jetpack Compose, and HILT.
- Implemented sharing and validation processes using Firebase Firestore for secure data management.
- Revolutionized user experience through the custom voice assistant, leading to increased user engagement and satisfaction.
- Ensured seamless integration of core functionalities from the mobile app into the in-car environment.
- Designed a key exchange protocol based on the customer's pairing idea, ensuring secure data exchange with built-in encryption.

Stack: Android, Android Automotive OS, Kotlin, Coroutines, Jetpack Compose, HILT, Firebase, Firestore, TypeScript, Node.js, Cloud Functions, GitHub Actions, Git, Shell, GitHub Copilot

[12/2021 – **Bar Webpage with Google Sheets Integration**
12/2021] **Full-stack Developer**

A webpage for a bar with a menu, store and contact form. The menu is managed through Google Sheets and the contact form and store is managed through Wix.com.

- Developed a highly customizable webpage for a top-class restaurant.
- Migrated and enhanced the structure of the old webpage using Wix.
- Implemented messaging, payment, shop, and content management systems.
- Customized content management system for drinks and food menus.
- Enhanced user engagement through a personalized webpage approach.
- Enabled easy manual updates of menus using a custom Google Sheets script.
- Facilitated seamless sharing of menu information with third-party providers.
- Empowered non-technical users to update webpage content without manual intervention.

Stack: Wix, Google Sheets, Google Apps Script

[01/2018 – **Product Manager for Wireless EMS System**

12/2019] **Product Manager for Wireless EMS System**

Managed hardware, firmware, Android and iOS mobile apps, and Google Firebase-based cloud infrastructure for world-leading wireless EMS System. Successfully managed a 15-member team, adapting and extending Scrum for various needs.

- Managed hardware, firmware, Android and iOS mobile apps, and Google Firebase-based cloud infrastructure.
- Successfully managed various stakeholders, including the Development Team.
- Ensured synchronization for the Tecnavites System development.
- Aligned diverse teams using Scrum, later adapted for specific team needs.
- Implemented extended Scrum for hardware team flexibility and time management.
- Designed software Scrum processes to meet team requirements without compromising overall quality.
- Prioritized comprehensive quality assurance, continuous integration, and continuous delivery for firmware development.
- Integrated Flutter SDK for mobile development, connecting backend and web application components under a single team.
- Implemented extended Scrum for hardware team, allowing for flexibility and time management.
- Ensured seamless integration of team contributions, enabling weekly to monthly feature delivery.

Stack: Scrum, Jira, Confluence

[01/2018 – **Flutter App for iOS and Android**

12/2019] **Flutter App for iOS and Android**

Spearheaded Flutter framework adoption for mobile development. Customized UI to fulfill special requests, ensuring user satisfaction. Managed store pages and app store listings, optimizing customer engagement.

- Spearheaded Flutter framework adoption for mobile development.
- Customized UI to fulfill special requests, ensuring user satisfaction.
- Implemented and maintained custom microservices for cloud connectivity.
- Managed store pages and app store listings, optimizing customer engagement.
- Developed a unified mobile app for Android and iOS with a single codebase.
- Successfully implemented real-time Bluetooth connection to hardware.
- Integrated and bridged C-based Bluetooth library without modifications.
- Established quality assurance with unit and integration testing.
- Automated alpha and production releases, enhancing efficiency.

Stack: Dart, Flutter, iOS, Objective-C, Swift, Android, Java, C, C++, GitLab CI/CD

[01/2016 – **Web App for License and User Management**

12/2019] **Web App for License and User Management**

Led the development of a global product management and license system for sales representatives. Successfully deployed the application across diverse environments worldwide.

- Built the initial backend architecture using Express.js, which was later ported to Firebase without changing the base architecture.
- Led the development of a global product management and license system for sales representatives.
- Successfully deployed the application across diverse environments worldwide.
- Spearheaded the project, showcasing expertise in Vue.js for rapid prototyping.
- Utilized TypeScript to enhance code quality and improve development efficiency.
- Implemented industry-leading testing frameworks, Jest and Cypress, ensuring comprehensive unit testing and end-to-end testing.
- Demonstrated the ability to deliver high-quality solutions under tight deadlines.

Stack: Express.js, Vue, JavaScript, TypeScript, Jest, Cypress, GitLab CI/CD

[01/2015 – **Firestore Cloud for Product License Management**

12/2019] **Firestore Cloud for Product License Management**

Successfully migrated license management code to Firestore, ensuring seamless integration and improved global backend operations. Introduced cloud functions for enhanced security, maintainability, and scalability. Designed an optimized database schema.

- Successfully migrated license management code to Firestore, ensuring seamless integration and improved global backend operations.
- Introduced cloud functions for enhanced security, maintainability, and scalability.
- Designed an optimized database schema, optimizing performance, scalability, and data integrity.
- Spearheaded the migration process, analyzing codebase, identifying compatibility issues, and implementing necessary modifications.
- Pivotal role in implementing cloud functions to automate tasks, improve response times, and ensure backend resilience.
- Maintained focus on product stability during the entire migration, with meticulous planning, execution, and continuous monitoring.
- Actively contributed as the principal architect in designing the database schema.

Stack: Node.js, TypeScript, Firestore, Cloud Functions, Firestore, GitLab CI/CD

[10/2014 –
12/2019] **Embedded Firmware for EMS Devices**
Embedded Firmware for EMS Devices

Developed a revised codebase crucial for the successful expansion to a broader range of embedded hardware and chips for Bluetooth-enabled EMS devices.

- Identified and addressed excessive Bluetooth chip command transmissions, significantly improving product quality and stability.
- Developed a revised codebase crucial for the successful expansion to a broader range of embedded hardware and chips.
- Contributed to the entire product lifecycle with a focus on firmware development.
- Collaborated with the team on migrating C libraries to structured C++ implementations for an organized and portable firmware codebase.
- Identified and resolved a critical bug related to excessive command transmissions by the Bluetooth chip, enhancing overall product quality and stability.

Stack: C, C++, Atmel, Bluetooth, GitLab CI/CD

[01/2015 –
12/2018] **Microservice Cloud for Worldwide Product Traffic**
Microservice Cloud for Worldwide Product Traffic

Spearheaded the introduction of microservices architecture to handle concurrent users and high-volume data transfer. Utilized Go, Docker and Kubernetes for efficient deployment and orchestration.

- Implemented microservices architecture for a complex product.
- Addressed scalability and maintainability challenges effectively.
- Ensured efficient handling of increasing user traffic and large data volumes.
- Managed Docker container networking and IP traffic analysis for distributed services.
- Spearheaded the introduction of microservices architecture.
- Utilized Go and Kubernetes for efficient deployment and orchestration.
- Selected MongoDB as the database for scalability and data management.

Stack: Go, Docker, Kubernetes, MongoDB, GitLab CI/CD

[11/2018 –
11/2018] **Unreal Engine VR App to Showcase EMS Suit**
Unreal Engine VR App to Showcase EMS Suit

Developed a virtual reality demo using Unreal Engine 4 and C/C++ to showcase an electrical muscle stimulation (EMS) suit. Integrated Bluetooth technology to communicate with the EMS suit via an iOS device.

- Developed prototype solo within five days.
- Achieved seamless user experience through iOS integration and Bluetooth signaling to initiate EMS stimulation.
- Independently designed and implemented the entire virtual reality demo.
- Integrated Bluetooth technology for EMS suit communication.
- Ensured deployment on iOS devices for user accessibility.

Stack: Unreal Engine 4, C, C++, Bluetooth, iOS, GitLab CI/CD

[11/2014 – **Native iOS App for EMS Training**

12/2016] Native iOS App for EMS Training

Led the development of the iOS app, implementing Bluetooth communication and custom UI elements.

- Successfully led the iOS app development, implementing Bluetooth communication.
- Established a semi-automated release workflow for alpha, beta, and production stages.
- Led the implementation of the mobile app on iOS.
- Introduced quality assurance measures with unit and integration testing.
- Managed App Store submission and created product page content.

Stack: Objective-C, Bluetooth, iOS, Custom UI

SKILLS & EXPERIENCE

Skill	Time	Years of Experience
ADTF	2013–2014	1
Android	2018–2024	4
Android Automotive OS	2022–2024	2
Angular	2020–2022	2
asdf	2021–2026	5
Astro	2024–2026	1
Atmel	2014–2019	5
AWS API Gateway	2024–2025	1
AWS Bedrock	2024–2025	1
AWS CloudFormation	2024–2025	1
AWS CloudWatch	2024–2025	1
AWS DynamoDB	2024–2025	1
AWS Lambda	2024–2025	1
AWS S3	2024–2025	1
Bash	2020–2026	6
Bluetooth	2014–2019	5
C	2013–2019	6
C#	2024–2025	1
C++	2013–2019	6
Cloud Functions	2015–2024	7
Confluence	2018–2019	2
Context Engineering	2024–2025	1
Coroutines	2022–2024	2
Cucumber	2020–2022	2
Custom UI	2014–2016	2
Cypress	2016–2022	6
DaisyUI	2025–2026	0.4
Dart	2018–2019	2
Data Governance	2026	0.2
devenv	2024–2026	1
Directus	2026	0.2
Docker	2015–2026	6
Docker Compose	2020–2026	6
Docker Stack	2026	0.2
Docker Swarm	2026	0.2
Dokploy	2026	0.2

Skill	Time	Years of Experience
drizzle-orm	2024–2026	1
Drupal	2020–2022	2
ETL	2026	0.2
Express.js	2016–2025	5
Firebase	2015–2024	7
Firestore	2015–2024	7
Flutter	2018–2019	2
Git	2014–2026	11
GitHub	2021–2026	5
GitHub Actions	2020–2026	5
GitHub Copilot	2020–2026	6
GitLab	2020–2022	2
GitLab CI/CD	2014–2025	6
GitLab Runner	2024–2025	1
Go	2015–2018	4
Google Apps Script	2021	0.1
Google Sheets	2021	0.1
GraphQL	2020–2026	4
graphql-mesh	2021–2026	4
HILT	2022–2024	2
Ionic	2020	0.8
iOS	2014–2019	4
Java	2018–2019	2
JavaScript	2016–2019	4
Jenkins	2013–2014	1
Jest	2016–2019	4
Jetpack Compose	2022–2024	2
Jira	2018–2019	2
just	2021–2026	5
Kotlin	2022–2024	2
Kubernetes	2015–2022	7
LangChain	2024–2025	1
Laravel	2020	0.8
Linux	2013–2014	1
Liquid	2025–2026	0.4
LLM-Integration	2024–2025	1
Microsoft SharePoint	2021–2024	4
MongoDB	2015–2018	4
Moq	2024–2025	1

Skill	Time	Years of Experience
Next.js	2020–2025	3
nix	2024–2026	1
Node.js	2015–2024	7
Nuxt 3	2021–2026	4
Objective-C	2014–2019	4
OpenCode	2024–2026	1
OpenSpec	2024–2026	1
PHP	2020	0.8
Playwright	2024–2026	1
Postgres Foreign Data Wrappers	2026	0.2
PostgreSQL	2021–2026	5
Power Automate	2021–2024	4
Prompt Optimization	2024–2025	1
Python	—	—
Qt	2013–2014	1
RAG-Pipelines	2024–2025	1
RBAC	2026	0.2
React	2020–2025	3
Redux	2020–2022	2
REST	2024–2025	1
Scrum	2018–2022	5
shadcn/vue	2024–2026	1
Shell	2014–2026	11
Shopify	2025–2026	0.4
Steampipe	2026	0.2
Storybook	2025–2026	0.4
Supabase	2021–2026	5
Swift	2018–2019	2
Tailwind CSS	2024–2026	1
Terraform	2024–2026	2
TypeScript	2015–2026	10
Unreal Engine 4	2018	0.1
Vector Stores	2024–2025	1
vee-validate	2024–2026	1
Visual Studio	—	—
Visual Studio Code	2014–2026	11
Vite	2024–2026	1
Vitest	2024–2026	1
Vue	2016–2026	10

Skill	Time	Years of Experience
Wix	2021	0.1
XML	2024–2025	1
XPath2	2024–2025	1
xUnit	2024–2025	1
Zod	2024–2026	1

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Get in touch: info@funzt.dev