Alexander Wegner

Software Engineer Expert
London, UK

- On Request
- alexander.wegner@outlook.com
- stish.github.io/wegner.dev/
- in/alexanderwegner/
- stish

Expertise
Leading teams • Creative solutions • Test Management • Automation • Embedded SW Development • ASpice • Toolchain • AI • Vibe coding • SPOC

Programming
Beginner ⟶ *Expert*

Modern Stack
(Python, AI Tools, Prompt Engineering)

Embedded & Model-Based
(C, MATLAB/Simulink)

Automation • Scripting
(Python, VBA, Delphi)

Tools & Frameworks
Agile • ASpice • VS Code • Git • GitLab • GitHub • CI/CD • Shell scripting • Confluence • Jira • cmocka • WSL2

Languages
Beginner ⟶ *Mother tongue*

German

English

Profile

Experienced Software Engineer with 12+ years in automotive series software development, specializing in ASPICE compliance, ADAS, and Battery Management Systems. Expertise spans comprehensive test management, advanced toolchain optimization, technical project leadership, and cross-functional team coordination across multiple international locations.

Key Aspects: Software Engineer • Team Lead • Technical Project Lead • Test Manager • Enabler • AI and Vibe Coding Enthusiast • Culture Builder • Team Motivation Driver

What Drives Me

"Engineer at heart - always questioning assumptions and redefining constraints. Maybe the glass isn't half full or half empty; perhaps the glass is simply too big."

My Guiding Values

- **Character comes before technical skill.**
  I believe the right personality, attitude, and team mindset have a greater long-term impact than any specific technical ability.
- **Humor and positive energy build stronger teams.**
  A light, friendly atmosphere encourages collaboration, creativity, and resilience during challenging projects.
- **Every process can be improved.**
  I constantly look for opportunities to optimize, automate, and streamline work to increase efficiency and reduce friction.

Experience

EDAG Engineering Limited   **September 2024 – Present**
Leamington Spa, UK
Software Development Expert
- Expat in the UK, working on cutting-edge automotive software projects
- Technical lead and SPOC in different automotive projects with ASPICE and ADAS focus
- Leading team of 15 engineers to deliver high-quality software solutions
- Management of teams from different countries and EDAG locations
- Technical onboarding of team members
- Distributing work and alignment with the customer
- Technical support for tools and toolchain improvements
- Prompt Engineer - Integrating AI into Everyday Engineering to optimize workflows and enhance productivity
- Using technical expertise for the acquisition of new customers in the UK and new technological fields/competences
- **Tools:** Doors, TPT, Jira, Confluence, VS Code, git, GitHub, Jenkins, Python, MATLab/Simulink, Autosar Classic

EDAG Engineering Group AG   **September 2021 – August 2024**
Berlin, Germany
Team Lead
- Grew and led a Software Development team from 0 up to 30+ employees
- Establishment of a new department and a new EDAG site in Berlin
- **Tools:** SAP, MS Office, Jira, Confluence

EDAG Engineering Group AG   **September 2019 – April 2024**

Berlin, Germany

Test Manager & Software Engineer

- Test Manager for model-based software development for software serial deployment in automotive sector with up to ASIL B
- Responsible for 10 software test engineers
- Test management, test planning, test case design, test execution, test automation, test reporting, toolchain management
- Led the test management activities that elevated the project from ASPICE Level 0 to Level 2
- Defined and implemented quality assurance processes aligned with Automotive SPICE standards and OEM requirements
- Successfully presented process improvements and results in multiple external ASPICE assessments
- Test of model-based software with MATLab TargetLink/Simulink (SIL) in the field of energy management
- Maintenance and enhancement of the toolchain
- Scripting and GUIs in VBA, Python and MATLab
- Requirement engineering
- **Tools:** Doors, SVN, git, gitlab, MATLab/Simulink/TargetLink, Python, VBA, VS Code, Jira, Confluence, Astreé, MXAM, MKS/PTC, cmake, cmocka, Autosar Classic

Family Inc.   **December 2017 – August 2019**

Oppole, Poland

Lead Developer & Junior Human Engineer

- Parental leave
- Spearheaded a high-stakes, 24/7 project involving rapid prototyping, sleep deprivation, and real-time problem solving
- Successfully deployed version 1.0 of a small human, ensuring stability, continuous improvement, and regular feature updates
- Improved multitasking, patience, and negotiation skills under extreme conditions
- **Tools:** Patience, creativity, time management, toys, baby bottle, diapers

Tiny Labs   **July 2015 – November 2017**

Oppole, Poland

Software Engineer iOS

- Freelance development of iOS applications
- **Tools:** Swift, Xcode, GitHub, git, VS Code

BFFT Gesellschaft für Fahrzeugtechnik mbH, later EDAG Engineering GmbH
November 2012 – June 2017

Gaimersheim, Germany

Software Engineer

- Validation of model-based software with MATLab TargetLink/Simulink (MIL/SIL/PIL) in the field of energy management for Audi/VW
- Maintenance and enhancement of toolchain using M-Script, Python and VBA
- Custom Windows Tools written in Delphi
- Custom C Code for replacing Simulink blocks
- Hardware integration on testing boards
- Maintenance of the testing boards
- Automation using CI with Jenkins
- Requirement management with Doors
- Software versioning and revision control with MKS/PTC
- **Tools:** Doors, MKS/PTC, MATLab/Simulink/TargetLink, Python, VBA, M-Script, C, VS Code, Jenkins, Delphi, Autosar Classic

Siemens AG - STA   **October 2011 – October 2012**

Berlin, Germany

Software Engineer - Working Student

- Designed, developed, and implemented a battery management system (BMS) for electric vehicles with smart grid integration
- Implemented state-of-charge (SOC) monitoring and estimation algorithms
- Developed battery cell balancing strategies to optimize battery life and performance
- Created SOC tracking and data logging functionality
- Integrated CAN bus communication protocols for vehicle network integration
- Developed dashboard visualization for real-time battery status monitoring
- Printed circuit board (PCB) design and prototyping for BMS hardware
- **Tools:** C, CAN bus, Eagle PCB, LaTeX, LabVIEW, **µC:** Atmel family, 8085/86, Infineon XC2267

Siemens AG - Dynamo Werk   **March 2011 – September 2011**

Berlin, Germany

Internship

- Led process optimization initiatives for the incoming goods division, implementing lean manufacturing principles
- Applied 5S methodology, Kanban systems, Just-In-Time (JIT) delivery, and Poka-Yoke error-proofing techniques
- Conducted value stream mapping to identify and eliminate waste in material flow processes
- Implemented lean administration practices to improve operational efficiency
- **Tools:** MS Office, Visio, MS Project, SAP, Lean Manufacturing, 5S, Kanban, JIT, Poka-Yoke, Value Stream Mapping

Siemens AG - STA   **April 2009 – September 2009**

Berlin, Germany

Internship

- Development of a robot-kit for educational purpose in foreign countries to teach basics of mechatronics and programming
- Programming of microcontrollers in C and assembly language
- Hardware and electrical design of the robot-kit
- Programming of a desktop application for easier programming of the robot (point and click programming like Scratch or Lego SPIKE)
- Development of teaching materials and workshops
- **Tools:** Eagle PCB, C, Delphi, µC: Atmel family

Education

B.Eng. - Electronic Systems   **October 2010 – October 2012**

Berliner Hochschule für Technik, Berlin

Studies

- **Thesis:** Implementation of a battery management system in a low-power electric vehicle and development/realization of an energy management system
- Modules: Microcontroller Systems, Embedded Systems, Electrical Engineering, Digital Signal Processing, Software Engineering, Hardware Design, Measurement Technology
- Studies conducted in English
- Grade: 1.53 (German grading system)

Associate Engineer of Mechatronic Systems **October 2008 – September 2010**

Siemens AG, Berlin

Apprenticeship

- Mechanics, Electrical Engineering, Software Development for Embedded Systems, Business Administration, Process and Team Management
- Apprenticeship conducted in English
- Grade: 1.16 (German grading system)

Hobbies

- Basketball - Twickenham Tigers
- Woodworking - TinyWorkshop | Instructables
- Pen and Paper RPGs - Learn more
- Geocaching - Geocaching.com