



Christian Woizischke

Software Engineering & Consulting

SKILLS

Programming languages (active)

- TypeScript, JavaScript
- C#
- HTML, SCSS
- PL/SQL

Programming languages (past/hobby)

- Python
- Java, Scala, Groovy
- C++
- Delphi, Turbo Pascal
- HLSL, GLSL

Cloud, CI/CD, DevOps

- Amazon Web Services (AWS)
- Azure Stack (basics)
- GitHub Actions
- Terraform
- Docker
- Kubernetes
- Serverless

Backend

- Node.js
- Nestjs
- WebAPI
- WCF
- Micro services
- Django

Frontend

- Angular
- React
- Bootstrap

Database

- SQL
- NoSQL
- Oracle
- DocumentDB
- MongoDB
- MySQL
- MSSQL
- MirkoORM
- Hibernate
- Sequelize

Desktop

- WPF
- WinForms

3D Visualization

- Unity3D
- Phaser
- Virtual Reality
- SteamVR

Testing

- Jasmine
- NUnit
- Playwright
- Protractor
- Cypress
- Jest
- Mocha
- Chai

Debugging

Performance Optimization

Other technologies (alphabetically):

- AJAX, Android, ANTS Profiler, AWS API Gateway, ASMX, ASP.NET MVC, ASPX, Autodesk 3ds Max, Autodesk Maya, Awesomium,
- Bash, Batch, Bolt (Unity3D), Boost (C++),
- Cassandra, Celery, Clarity Design, AWS CloudFormation, AWS CloudFront, AWS Cognito, Concourse, Cordova, Cypress,
- Direct3D, Directus, AWS DocumentDB, .NET, dotTrace,
- EBICS, Eclipse,
- Facebook API, Fuzzy Logic, FTP,
- Game Development, Genetic Algorithms, GIT, Google API,
- HPQC, HPSM, HTTPS,
- IIS, iText,
- J2EE, J2ME, JDBC, Jira, JQuery, JSON,
- Klaxoon, Knockout.js,
- AWS Lambda, Linq, Linux, log4j, log4net, Lucene,
- Mantis, Maven, Micro services, Miro, MS Office, Multithreading, MVVM,
- Neural Networks, Nextjs, NPM, Numpy, Nx,
- ODBC, Open Street Map, OpenGL, OpenVR,
- Pandas, PDF, Photoshop, PhysX, Puppeteer, PyCharm,
- Razor (ASP.NET), Redux, Reflection, Remult, REST, RSS, RXJS,
- AWS S3, Selenium, ServiceStack, AWS SES, Shell, SignalR, Silverlight, SNS, SOAP, Solr, SQL Developer, AWS SQS, SSH,
- T4 Templates, TCP, Team Foundation Server (TFS), Telerik, Tensorflow, Testlink, Toad,
- UML, Unit Tests, Unity DI, Unix,
- Visual Studio, Visual Studio Code, VIVE, VRTK,
- Web Services, WebSockets, Windows API, WinForms,
- XBOX, XNA, XML, XS2A, XSLT,
- YAML

INDUSTRIES

- Automotive
- Finance
- Retail
- Insurance
- Entertainment

LANGUAGES

- German (native)
- English

OTHER

- Born in 1986 in Braunschweig
- Married, no children

Since 2023 Fleet management web application for major customers

- Expansion and maintenance of an international web application for major customers in the automotive industry with interfaces to external systems such as DataPower and Oracle DB.
- Team size: 8 developers, 4 business analysts, 2 tester, 1 technical application manager, 1 Scrum master.
- **Implementation, code review, presentations, estimations, documentation, monitoring, performance optimization, security, debugging.**
- Working with **SCRUM** methods such as refinement, planning, dailies, retrospective, SAFE synchronization with other teams.
- **Software development** with TypeScript, Angular, Bootstrap, .NET C#, WCF, WebAPI, JSON, SOAP, Azure Stack, Oracle PL/SQL, inhouse frameworks.
- **Test automation** with Playwright, Protractor, Unit-Tests.
- **Azure DevOps** for task management, code reviews, build and deployment configuration.
- Incident management with HP ITSM.
- **API specification** with other departments.
- **International** meetings and **presentations**.

2022-2023 Cloud engineer for chatbots and voicebots at Otto Group

- Development of **cloud micro services** for new and existing chatbots and voicebots. Ensuring the operation of the infrastructure on AWS. Integrating external systems (internal and third-party services).
- **DevOps**: Monitoring, debugging and hotfixes in the production environment.
- **Performance and stability optimizations** of the cloud infrastructure.
- Team size: 3 Node.js/Terraform developers, 3 Python developers / data scientists, 2 product owners, 1 agile coach, 1 tools developer.
- **Software development** with Node.js, TypeScript, JavaScript, Jest, Serverless, Terraform, AWS (Lambda, EC2, RDS, Cognito, S3, SES, SNS), GitHub, GitLab, Jira.
- **Test automation** with jest unit tests.
- **SCRUM** including reviews, refinements, plannings, daily meetings.
- **CI/CD** with Terraform and GitHub Actions.

2019-2022 Public web application for financial and legal transaction services

- Green field development of a public **cloud-native** web application for facilitating financial transactions between end users and for marketing financing products.
- **Primarily responsible** for the **backend architecture** and **implementation**. Occasional implementation of frontend features and back-office tools.
- We created over 200 AWS Lambda Functions with Node.js.
- The software architecture was heavily relying on **micro services** with **message queueing systems** such as AWS SQS and AWS SNS. Asynchronous jobs. Client state management with **Websockets**.
- Data was stored in AWS DocumentDB (MongoDB) with complex queries and migration scripts.
- **CI/CD** with Serverless and CloudFormation templates via Concourse.
- **Automation of credit transfer and direct debit** using FintecSystems XS2A and EBICS.

- Focus on **transaction security** and **web security**. Implementations were checked by external pentest providers.
- Integration of Verimi and IdNow for user verification.
- Team size: 2+ temporary and permanent full-stack developers, 1 frontend developer, 1 tools developer, 2 UI/UX designer, 2 tester, 2 workflow analysts, business analysts, marketing and more.
- **Software development** with TypeScript, Node.js, React, HTML, SCSS, Serverless, AWS (Lambda, DocumentDB/MongoDB, CloudFormation, Cognito, S3, SES, SQS, SNS), Concourse, GitHub, Jira, Websockets.
- **Test automation** with unit tests (mocha, chai, sinon) and integration tests.
- **SCRUM** with 3-week sprints, sprint reviews with in-house presentations, refinements, plannings, daily meetings.
- **DevOps**: Debugging and hotfixes in production environment.

2015-2019 **In-house web services at Volkswagen Financial Services**

- Developing web services for finance products in the automotive industry. Lots of interfaces to external systems.
- Team size: 4 backend and tool developers, 2 database developers, 1 project manager.
- Designing and implementing WCF web services and their monitoring tools.
- Coordinating with business departments, software vendors, testers, IT operations colleagues.
- Focus on **transaction security** and asynchronous jobs.
- **Software development** with .NET C#, WCF, WebAPI, ASMX, SOAP, JSON, ASPX, WinForms, Oracle DB, interfaces to SAP and DataPower
- **Documentation** of the software architecture and interfaces.
- **Test automation** with NUnit unit tests, SoapUI integration tests, Test documentation with HP-QC.
- Creating **build and release definitions** for continuous integration with MS Team Foundation Server (TFS).
- Incident management with HP Service Manager.
- On-call emergency service during release.
- **Consulting** about software architecture and refactoring roadmap.

2013-2018 **In-house web application at Hannover Rück**

- Implementing a web application from scratch for CRM and business processes of insurance companies.
- Team size: 3 developers, 1 tester, 1 designer, 1 project manager
- **Requirements engineering, software design, implemented** 50% of the code.
- **Software development** with .NET C#, Silverlight, Oracle, SQL, NHibernate, Entity Framework, Unity Container, Telerik, JavaScript
- Working with **SCRUM** methods such as sprint reviews, refinements, plannings, daily stand up.
- **Consulting** about software architecture and UI/UX.

2011-2013 **Web application for Volkswagen at CGS mbH**

- Developing a web application for CRM processes and workflows of major customers of Volkswagen.
- Team size: 5 developers, 2 project managers.
- Applying certain methods of SCRUM.
- **Requirements engineering, design and implementation** of new modules.
- **Software development** with JSP, JavaScript, Java2EE, Oracle , Swing, PL/SQL.
- Server-side rendering of charts.
- Implementation of **database** functions.
- **Manual testing** and **test automation** with custom JavaScript frameworks.
- **Consulting** about software **architecture** and **UI/UX**.

2009-2011 **Research and software development at TU Braunschweig**

- Project "VESPER" for the Ministry of Research and Education (Bundesministerium für Bildung und Forschung, BMBF) about security in public transport via ferry.
- Research and implementation of a 3D visualization and simulation of passengers and security scenarios on a ferry and in the harbor.
- Team size: 1 developer, 1 project manager, 2 3D model designers
- **Requirements engineering**
- **Software development** with C#, C++, WPF, Autodesk Maya, Photoshop
- **Research** and **design** of novel **user interfaces**.
- Assistant 3D modeling.
- **Documentation, reports, and presentation.**
- <https://www.sifo.de/de/vesper-verbesserung-der-sicherheit-von-personen-in-der-faehrschiffahrt-1834.html>

EDUCATION

2012 **ITIL V3 Foundation**

2005-2008 **Bachelor in Computer Science**

- Technical University Braunschweig
- Final grade: 1.8
- Specialization in computer graphics, minor subject in psychology.
- Thesis: Ray Tracing with the Single-Slab Hierarchy
<https://graphics.tu-bs.de/publications/Eisemann08SSH>

1998-2005 **Abitur**

- Lessinggymnasium Braunschweig
- Final grade: 2.8
- Specialization in mathematics and physics

Since 2023 **Road trip planner web application**

- Full-stack development of a web application for planning custom road trip itineraries automatically. The service scrapes Open Street Map and public domain content from the web. The goal is to compile the shortest route with most interesting attractions of a geographical region.
- Team size: 1
- Technologies: React, Nextjs, Django, Bootstrap, Playwright, TypeScript, Python, Docker, Kubernetes, Open Street Map.

Since 2022 **CRM web application**

- Full-stack development of a web application for typical CRM needs such as a customer database, leads and invoices.
- Team size: 2
- Responsible for 50% of all work.
- Technologies: Angular, NodeJS, Remult, Clarity Design, Nestjs, Nx, Directus, GitHub Actions, Docker, Kubernetes
- Partially open source on <https://github.com/BaamStudios/kontoras3>

2021-2022 **Invoice downloader web application**

- Full-stack development of a web application for downloading PDF documents from arbitrary third-party online providers.
- Team size: 2
- Responsible for 50% of all work.
- Technologies: Angular, NodeJS, Nx, MongoDB, Cypress, Puppeteer, Docker, GitHub

2021 **Digital picture frame**

- Full-stack development of a web application for displaying photos, weather, calendar, traffic information and more.
- Team size: 1
- Technologies: Angular, NodeJS, Docker, GitHub, Raspberry PI
- Open source on <https://github.com/chrwoizi/woiziframe>

2021 **Password management**

- Full-stack development of a web application for managing passwords. Includes a Google Chrome extension.
- Team size: 1
- Technologies: Angular, NodeJS, Docker, GitHub
- Open source on <https://github.com/chrwoizi/wozipass>

2018-2019 **Stock market trading web application with machine learning**

- This multi-user application presents the user with a share price chart and encourages the user to make a spontaneous and intuitive purchase decision. The collected decisions are analyzed by a machine learning algorithm and can then be automatically applied to new, unseen share price trends.
- The system independently buys and sells stocks based on the user's behaviour.
- Team size: 1
- Technologies: TypeScript, JavaScript, Nodejs, Angular, Bootstrap, Python, Tensorflow, MySQL, Sequelize, SQL, Docker
- Open source on <https://github.com/chrwoizi/naytrading>
<https://github.com/chrwoizi/naytrading-ai>
<https://github.com/chrwoizi/naytrading-trader>

2010-2011 **Windows Phone mobile game**

- Modern interpretation of Tetris. Hand-drawn pencil-style assets.
- Team size: 1 developer and graphics designer, 1 assistant developer, 1 sound engineer
- Responsible for 90% of the code and for all graphics assets
- Technologies: C#, XNA, REST
- Published to the Windows Phone Marketplace
- Featured in the Spotlight section of the Windows Phone Marketplace
- >200.000 individual users
- <https://www.youtube.com/watch?v=wm2UnKNTjFM>

2012 **Social media website**

- Development of a web application that encourages its users to learn new skills or showcase their skills through gamification. Users can create public challenges and offer a virtual reward in the form of experience points and badges. Other users then demonstrate their skills with pictures and videos and thus receive their reward.
- Team size: 1
- Technologies: Scala, GWT, MongoDB, Tomcat, Solr
- Open source on <https://github.com/chrwoizi/busyhumans>

Since 2004 **2D/3D game development**

- Occasional game development projects and prototypes with modern technologies in small teams or alone.
- Team size: 1-2
- Technologies: Unity 3D, Bolt, HTC VIVE, SteamVR, VRTK, .NET C#, Nodejs, MySQL, Sequelize, TypeScript, Phaser, XNA, more