Eike Folkerts

Softwareengineer

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personal details

Year of birth: 1988
Place of birth: Aurich

education

03/2012–07/2016 **University of Applied Sciences Hannover**, *Bachelor of Engineering (B. Eng.)*, electrical engineering and information technology, area of specialisation in computational engineering.
bachelor thesis: developing a surveillance system "Casa Control", grade 1,0

10/2010–02/2012 **Leibniz University Hannover**, *Bachelor of Science (B. Sc.)*, electrical engineering and information technology.

2006–2009 **High School**, *Conerus-Schule*, Norden.
Major in Economics, Mathematics and English

work experience

04/2022–12/2022 **Freelance: DevOps Engineer**, *ise Individuelle Software und Elektronik GmbH*, Oldenburg.
DevOps Engineer, details below

01/2022–06/2022 **Freelance: Full-Stack Engineer, Consultant**, *Datineo GmbH*, Spelle.
Flutter App development, details below

09/2015–12/2021 **Software Engineer**, *Energy-Analysis GmbH*, Aurich.
details below

03/2018–09/2022 **Software Engineer**, *Folkerts Good Energy GmbH*, Norden.
marginally paid employment, hard- and software support, automation of calculation processes, optimization of internal processes

07/2015–09/2015 **Internship**, *Energy-Analysis GmbH*, Aurich.
developing an automation software for internal processes

08/2014–09/2014 **Internship**, *Energy-Analysis GmbH*, Aurich.
developing a native Android App

07/2013–09/2013 **Semester break job**, *Volkswagen AG*, DLN service provider Nord GmbH, Emden.

07/2012–09/2012 **Semester break job**, *agricultural enterprise, Johann Boerma*, Norden.

06/2010 **Study-preparing Internship**, *ENERCON: Mechanic GmbH*, Aurich.
3D modelling a pullclaw, to disassemble the hub of an wind power plant

05/2010 **Study-preparing Internship**, *ENERCON: Elektric Schaltanlagenfertigung GmbH*, Aurich.
programming a washing bay and traffic light system

08/2009–04/2010 **Community Service**, *Behindertenhilfe Norden GmbH*, working with disabled people, field of education in metal & paper, graphic design.

language

German	first language
English	fluent
French	proficient

computational skills

	Level	Skill	Years	Comment
Language	■■■■□	Java	4	*Multiple projects, Frontend/Backend*
	■■■■□	JavaFX	3	*Multiple applications for desktop*
	■■■■□	Flutter/Dart	2	*BloC, RestAPI, Provider, Clean Code, TDD, Unit/Widget/Integrationtests*
	■■■□□	Android (Java)	2	
	■■■□□	Backend	2	*MySQL, PostgreSQL, MariaDB, MongoDB, InfluxDB, Java Spring, JPA, RestAPI*
	■■□□□	C#	1	
	■■□□□	Python	1	
	■■□□□	Swift+ObjectiveC	1	
	■□□□□	other	0	*Node.js, Arduino, Lua, C, C++, JavaScript, PHP, VBA, PureBasic*
Tools	■■■■□	DevOps	4	*Docker, Gitlab, Jenkins, Puppet, Foreman, codemagic, Grafana, Powershell, Unix Shell, CI/CD, AWS, Kubernetes*
	■■■■□	Server	4	*Proxmox, VMs, CTs, Networkmanagement, VPN, Firewall, NAS, ZFS, Raid, TrueNAS, OMV, Bookstack, Syncthing, Nextcloud, Reverse Proxy Manager (nginx), Jitsi, Grafana, Unifi, Kimai, Bitwarden, Synology*
	■■■□□	Building automation	3	*KNX, Modbus, MQTT, Falcon.NET, Zigbee, Node-Red, openHAB, Grafana*
	■■■□□	LaTeX	3	
Methods	■■■□□	SCRUM	3	
Design	■■■■□	Graphic design	6	*Photoshop, Gimp, Inkscape*
	■■■□□	Video editing	2	*Premiere, Kdenlive*
	■■■□□	3D modelling	2	*SketchUp, 3ds Max*

interests

- homelab
- Linux
- smart home without cloud
- drums
- Microcontroller
- Raspberry Pi
- KNX tinkering
- dog training
- PC- and retrogaming
- sports
- hiking
- IoT
- Camera technology
- 'Eike my Wifi is not working'

projects

ise Individuelle Software und Elektronik GmbH, 2022

- used technologies: Jenkins, Gitlab, C#, Proxmox, Powershell, Foreman, Puppet, Grafana, Windows Server, Unix shell, Confluence, Jira, Scrum
- Maintenance of build jobs in Jenkins for the KNX ETS Software
- Automation of tests and visualization of results
- Standardization of solutions and tools in the build context
- Categorization of occurring build errors based on the build output of the projects by root cause
- Administration of container-based infrastructure based on Docker, Docker swarm and Kubernetes
- Maintenance and optimization of CI/CD pipelines on Jenkins and Gitlab
- Maintenance and upkeep of test systems
- Interface function Between the development teams and the IT department

Datineo GmbH, 2022

- used technologies: Flutter, Dart, Spring Boot, MySQL, Jira, Jenkins, Scrum, Confluence, Bitbucket, Keycloak, Unity 3D Modelling, Figma, Zeplin
- Technical consultant for fullstack development and DevOps
- Implementation of a Flutter mobile app for the technical recording of agricultural machinery

Energy-Analysis GmbH, 2015-2021

- Developing Java software for monitoring and regulating wind power plants
- Java Backend with MySQL-DB, collecting data over OPC, modem, ODBC
- JavaFX, Java, Swift: Frontend Applications. Desktop-Client (Windows, Linux, MacOS), Android-App, iOS-App (Tablet and Smartphone) with constant updates on all operating systems
- Push notifications over Firebase (former Google Cloud Messaging)
- Set up Jira Server for agile programming
- Set up BitBucket (later GitLab) Server for version control with git
- weekly, fully automated complete backup from company server to external hdd and external private file server over own openvpn server, ransomware-safe
- Automation for internal calculation processes on wind energy outages. Reduced the time consumption for one calculation from 45 minutes to 10 seconds
- Server virtualization of multiple VMs/LXCs with Proxmox VE and Docker
- Frontend redevelopment with Flutter
- Backend redevelopment with Spring/JWT

AckerSchlacker, 2016

- Android-App for agricultural enterprise to document operations on fields
- Server-Client-communication with MariaDB, RestAPI and JSON
- Creating Latex-PDF for yearly overview about fields and crop rotation
- Camera technology for observing calving
- Self programmed electrical outlet to control pasture fence from the field (important for repairs)

private smart home, 2019

- Equipped own new house with KNX bus system and other home automation components in 2019
- All components act without an internet connection, everything is offline
- Self-managed planning, design, programming and implementation of the whole system
- Following components are connected: Shutters, electric sockets, ceiling lights, light spots, light stripes, floor heating system, skylights, meteorological station, presence detectors, offline voice control, outdoor cameras, own programmed intercom system for communication from door to phone including opening the garage door for packages, door with fingerprint sensor, garage door, robot vacuum cleaner, robotic lawn mower, smart electricity meter, home ventilation system, thermal heat pump, septic tank, smoke detector, TV, window and door sensors, motion detectors outside, Sonos, multiple Zigbee radio components, presence detection by phones, phone localization communicating with my server, weather alerts, garbage collection schedule
- Visualization with InfluxDB und Grafana
- Various proprietary solutions are connected in openHAB
- Camera detects motion outside and triggers outdoor light over KNX
- Fingerprint sensor can start Netflix-mode with lighting in living room
- Ringing the doorbell at my house triggers my phone to play a dingdong-sound, connect to my home VPN server, starting the camera app and asks to open the garage door when I am not at home.
- Ammonia sensor to detect the ammonia content in the air. If liquid manure is being applied to the nearby fields, the home ventilation system is going to shutdown over the KNX bus system