Internship at KEB Automation KG in Heilbronn

Do you want to write software that enables novel digital services for connected machines in an Industrial IoT setting? Would you like to work all the way from Linux on a PLC to web apps in the browser or in the cloud?

In Heilbronn KEB is building a new generation of tools that connect machines and enhance their capabilities. On top we develop advanced software solutions from the user interface (HMI) to cloud-based services. Join our young and agile team and work with the experts!

KEB is one of the leading providers of drive and automation technology. After starting out with just six workers in 1972, we’ve developed into a global medium-sized company with almost 1,400 employees, of which 850 work at our headquarters in Barntrup and about 25 in Heilbronn as a new software development hub within KEB.

Follow @kebautomationkarriere on Instagram to stay up to date.

What we offer

- You’ll become part of an ambitious team that will
  - re-invent how a user interface is created for the machining industry. This includes the communication layer, application server, user interface technology and user experience of the resulting HMI.
  - develop and offer a unique IIoT ecosystem (KEB NOA) with apps and services that fit to the customer’s environment and scale in well-defined steps.

- You’ll work in a professional software development environment on practical tasks in product development as well as in research projects and proof-of-concept prototypes.
- We use state-of-the-art tools (Azure DevOps) and programming languages (i.e. C++/C#); our architecture is platform-independent and container-based; the frontend is built on web technologies. We work in an agile setting to develop the products dynamically following market needs in close exchange with early adopters.
- You’ll not only design and develop your own software components, but also analyze the market needs, create requirements for the software developers, test, document, and modify new and existing applications.
- You’ll create user-friendly, ergonomic tools with outstanding design and user experience (UX).
- It will be challenging but we’re here to give you guidance and support catered to your needs.
Choose your Challenge

- Write software for a platform-independent controller (PLC/IPC).
- Build the infrastructure to connect everything from PLC to HMI to Cloud.
- Develop backend services that the HMI tools build upon.
- Define and implement communication protocols (APIs) between such services.
- Make the connection between backend and frontend performant and versatile.
- Develop tools which provide the necessary data to adapt our solutions to the customer needs. These tools will support our customers and sales organization as well as the software development.
- Align the needs of existing users and customers of our ecosystem to its technical capabilities and role models based on user profiles.
- Translate insights from the market into requirements for the software team and support the developers during implementation.
- Take care and improve our development infrastructure, build pipeline etc.
- Extend our software with your app that integrates into our ecosystem (service-based).
- Implement UI/HMI components for new ways to visualize data from the machine(s).
- Project, conceptualize and realize HMs for customer projects.
- Improve the Usability and User Experience of the tools and end results.

What we expect

- You are a student of engineering, computer science, software engineering, systems engineering, service management or similar.
- You’re fluent in at least one object-oriented programming language (e.g., C++, C#, Java).
- High degree of initiative, flexibility, and independence.
- Team player with result-oriented attitude and confident manner.
- Good oral and written English skills, German is a plus.
- Know-how and previous experience in control and automation technology as well as mechanical engineering, mechatronics etc. is a plus.

Gain valuable and authentic insights into our everyday work and learn about our industry while you’re still at university. KEB offers you the chance to do an exciting and informative internship!

Who we are

- Experts from the fields of mechanical engineering, computer science, software engineering and psychology - working together in a start-up-like setting to build the best solution for our customers and end users.
- We work together along the lines of Scrum as agile development process. We value individuals and interactions over processes and tools.¹ We are committed, focused, open, respectful, and courageous.²

Application

- Normal duration of an internship is 6 months.
- Bachelor and Master theses are welcome!
- Location: KEB Süd, Ferdinand-Braun-Straße 14, 74074 Heilbronn
  Working in Heilbronn (https://www.keb.net/careers-new/we-are-keb/working-in-heilbronn)

Interested? Then apply by e-mail: job@keb.de.

Send us a short application with your CV. Please don’t forget to indicate your preferred start and end date, as well as the field in which you’d like to do an internship.

¹ Manifesto for Agile Software Development (agilemanifesto.org)
² The Scrum Guide (Scrum Values), Download from scrumguides.org; Scrum Values Poster