

Anna Kohlbecker, Computer Scientist



PROFILE

With team spirit, initiative, diligence, and expertise, I contribute to the efficient development and optimization of projects and their successful implementation in practice.

WORK EXPERIENCE

Mar 2025	—	Sep 2025	Programmer, Roche (Dep. Data Advisory and Insights), Mannheim Optimization of an AI tool to support sales managers in their decision-making, with the aim of increasing sales and maximizing employee efficiency.
Jun 2024	—	Sep 2024	Programmer, Roche (Dep. GLIDE Data Science and AI), Basel Improvement of a recommendation system that uses machine learning models to enable personalized email campaigns in order to increase customer satisfaction, reach, and sales.
Dec 2023	—	Mar 2024	Programmer, Roche (Dep. pRED Data & Analytics), Basel Design and implementation of an intelligent chatbot that automatically generates high-quality code for REST APIs using state-of-the-art AI technologies, thereby accelerating development processes.
Jun 2023	—	Oct 2023	Programmer, Roche (Dep. Diabetes Care Sales Force), Mannheim Expansion of a modular workflow platform for automating the sales process in the point-of-care sector.

EDUCATION

Oct 2022	—	Sep 2025	Bachelor of Science in Computer Science, DHBW & Roche, Mannheim Grade: 1,7
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SKILLS

Languages	German (native language), English (B2/C1), Spanish (B2), French (B1)
Technical	Python, AI, databases, web and app development, Scrum
Personally	Optimism, initiative, teamwork, diligence, discipline

HOBBIES

I enjoy jogging in nature, reading inspiring biographies, and working on my own software projects.

Roche Training Program

1. Personal Details	
Course of Study	Computer Science
Special Knowledge and Skills	Project management: GitHub, GitLab, classic and agile process models, application of Scrum in projects Programming languages: Python, Java, JavaScript, TypeScript, SQL Databases: Many types used in DHBW projects (relational database (MySQL, PostgreSQL, Supabase), document-oriented database (MongoDB), object storage (MinIO, AWS S3 bucket), graph database (Neo4J), in-memory database (Redis)) Software quality: Unit tests, automated end-to-end testing (Playwright), DevOps, Docker, pipelines (Kubeflow), TDD Software development: Development of websites (React), mobile applications (React Native), chatbot UIs, Rest APIs Artificial intelligence: AI libraries (TensorFlow, LightFM), vector ranking, neural networks, graph models, NLP, computer vision, predictive analytics, LLMs, agents

2. Practical Phases at Roche	Content taught/Areas of Responsibility
Department Name Global Customer Support	Development of an automated team management board to improve performance & creation of an intranet page: ● Google Sites ● Google Sheets ● Google Slides ● Apps Script (JavaScript)
Supervisor Sara Rusnak	
Time Period 26.12.22 – 16.04.23	
Location Mannheim	
Department Name	Expansion of a modular workflow platform for automating the sales process in the point-of-care sector:

Diabetes Care Sales Force	● Outsystems ● MySQL
Supervisor Christian Keller	
Time Period 10.07.23 – 01.10.23	
Location Mannheim	
Department Name pRED Data & Analytics	Design and implementation of an intelligent chatbot that automatically generates high-quality code for REST APIs using state-of-the-art AI technologies, thereby accelerating development processes: ● AI agents (Autogen Framework) ● LLMs ● REST APIs (with Swagger) ● GitLab ● Python
Supervisor Dr. Torsten Schindler & Dr. Raul Rodriguez-Esteban	
Time Period 25.12.23 – 31.03.24	
Location Basel	
Department Name GLIDE Data Science and Artificial Intelligence	Improvement of a recommendation system that uses machine learning models to enable personalized email campaigns in order to increase customer satisfaction, reach, and sales: ● AI libraries (TensorFlow, LightFM) ● Recommender system model ● Hyperparameter optimization ● GitLab ● Python ● Pipelines (Kubeflow) ● Scrum ● DevOps
Supervisor Eduardo Vioque-Martínez	
Time Period 24.06.24 – 29.09.24	
Location Basel	
Department Name Data & Analytics Chapter - Data Advisory and Insights 7	Optimization of an AI tool to support sales managers in their decision-making, with the aim of increasing sales and maximizing employee efficiency: ● GitLab ● Python ● Figma ● UX ● ChatGPT-API ● Snowflake ● Scrum
Supervisor Markus Dietz	
Time Period	

31.03.25 – 30.09.25	
Location Mannheim	

3. Training in the Training Department	Content taught
Project Weeks	
„Einführungswoche“	Legal information about Roche, teamwork
„Fit fürs Team“	Communication, teamwork
„Wir im Prozess“	/ (Due to deployment in Switzerland, participation was not possible)
Professional Training	
Basic Training	General regulations at Roche
English	B2/C1
In-company training/ Personalized training modules	• Skills for the digital workplace • Empathy • Apps Script • Body language and voice • Scientific work

4. DHBW (University)	Content taught
Theory Phase 1	• Programming: Java • Web Engineering • Theoretical Computer Science: Fundamentals and Logic • Digital Technology • Analysis
Theory Phase 2	• Programming languages: Python • Group project: Website development • Theoretical computer science: Algorithms and complexity • Technical computer science: Digital technology • Linear algebra • Business administration
Theory Phase 3	• Software Engineering • Communication and Network Technology • Operating Systems • Computer Architecture

	• System-Oriented Programming • Advanced Algorithms • Applied Mathematics • Statistics
Theory Phase 4	• Software Engineering • Databases: SQL • Theoretical Computer Science: Compiler Construction, Automata, Formal Languages • IT System Security • Fundamentals of Digital Transformation: Big Data, Internet of Things
Theory Phase 5	• Software Engineering • Term paper: App development for real-world use cases • Databases • Mobile application development • Process models: Agile process models, classic models
Theory Phase 6	• Term paper: App development for real-world use cases • New concepts: AI tool comparison for programmers • Software quality of applications (testing) • Artificial intelligence