# Tim Krebs

# **CLOUD SOLUTION ARCHITECT**

## Objective

Since March 2021, I have dedicated myself to the role of a Cloud Solution Architect at Microsoft, where I specialized in resolving complex issues pertaining to Windows 10 and Windows 11. This position enabled me to significantly sharpen my analytical abilities and deepen my technical expertise within a dynamic and challenging environment. My experience at Microsoft has not only honed my technical acumen but also fostered a strong appreciation for the company's values and collaborative culture. As I aspire to transition into Software Engineering, I am eager to leverage my passion and skills in this field. Continuing my professional journey at Microsoft is a priority, as I am keen to contribute further to an organization that aligns so closely with my professional ethos and personal values.

Education	2024-Present	International University of applied Sciences  M.Sc. Computer Science (currently pursuing)
	2017-2020	Coburg University of Applied Sciences B. Eng Electrical Engineering
	2016-2017	Technische Hochschule Nürnberg Georg Simon Ohm Dual Study in Building Services Engineering (not completed)
	2014-2016	Maximilian-Kolbe-Schule Neumarkt Technical Subject Area
	2008-2014	Hauptschule Altdorf Secondary school leaving certificate branch

### **Experience**

#### Mar 2021 - Present Cloud Solution Architect - Microsoft

As a Cloud Solution Architect at Microsoft, I am primarily responsible for analysing and resolving complex customer issues related to Windows 10 and Windows 11. This role is critical to ensuring optimal system performance and achieving a high level of user satisfaction. I specialise in the

development and implementation of PowerShell scripts, an important aspect of my role that improves data collection and automates routine tasks. This not only optimises workflows but also efficiently maximises resource utilisation.

In addition to these technical tasks, I am actively involved in the design and implementation of innovative strategies. These strategies aim to evolve our clients' technical environments and ensure that their IT infrastructures are not only improved but also future-proofed. By providing these innovative solutions, I help our customers stay ahead in a rapidly evolving digital landscape.

Oct 2020 – Mar 2021

### Software Engineer – MSR Software GmbH

Specialized in the programming and integration of fully automated production lines, including the seamless integration of KUKA industrial robots. I played a central role in the development and implementation of a sophisticated data management system to optimize production efficiency and accuracy. My work utilized state-of-the-art technologies and programming methods to ensure a high level of automation and reliability in the manufacturing process.

May 2019 – Sep 2020

#### Software Engineer – Working Student

As a software engineer, I have experience in programming ARM Cortex M4/M3 microprocessors with C/C++ and in developing intuitive graphical user interfaces with Python. My portfolio includes the design and implementation of software for autonomous robots specifically tailored for Cortex M4 microprocessors. A key project in my career has been the design and development of a real-time signal processing system implemented on a Xilinx FPGA using C++ and VHDL. This diverse technical background emphasizes my ability to tackle complex technical challenges and develop innovative solutions in the field of software development.

# **Projects**

#### **CRUD API in Python**

- Development of a robust CRUD API with FastAPI,
   Pydantic that integrates essential functions such as SQL database operations and ensures seamless data management.
- Implementation of comprehensive test protocols with Pytest to improve the reliability and performance of the API.
- Established a CI/CD pipeline that demonstrates a commitment to efficient, automated workflows and continuous integration principles.

#### Speech Recognition Engine in C++ for MCU

- Development of a Continuous Density Hidden Markov Model (CDHMM) in C++ using the Standard Template Library (STL) and CMake for build automation.
- This advanced model can recognize 16 different words from different independent speakers, demonstrating its versatility and accuracy in speech recognition.

#### Monitor Manager Software C++

- Development of an innovative desktop application for the effective management of monitors, allowing users to easily arrange and position their monitors.
- The application has a user-friendly start window and works unobtrusively in the background.
- A handy taskbar icon has been integrated to allow users to easily change monitor positions, improving usability and system functionality.

# Professional training

#### **AZ-900 Azure Fundamentals**

Fundamentals of Microsoft Azure - Demonstrate basic knowledge of cloud concepts, Azure services, privacy, security, compliance, and support within the Microsoft Azure cloud platform.

#### MS-900 Microsoft 365 Fundamentals

In-depth knowledge of Microsoft 365 fundamentals, including cloud concepts, service offerings, security, compliance, privacy, and support. Successful completion of the exam validates the ability to implement and manage Microsoft 365 solutions within organizations.

# Development of a system application with Control Plus - specifically for Beckhoff TwinCAT

Introduction of the IEC 61131-3 and the programming system TwinCAT3. Step sequences, library administration, structures, and variables also communication connection with target systems. Key points are the utilized IEC programming languages ST (structured text) and AS (sequence language). Familiarization with the fundamental concepts Structuring of system software.

#### **AWS Machine Learning Certificate**

Basics in AWS Machine Learning, Software Engineering Practice, fundamentals in Code Review and Object-Orientated Programming in Python

Languages	German	Native language
	English	Intermediate Listener, Novice Speaker, Advanced Reading and Writing
Computer skills	Programming	C++, C, Python, PowerShell
	Platforms	Windows, Linux, MacOS