



# Turn data into clarity. Turn Tasks into Automation.



## Felix Correll

Python Expert | Automation Engineer | KPI Dashboard Developer

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## Profile

I believe that too much valuable time is lost in companies due to manual, error-prone processes. My goal is to leverage modern technology to eliminate this inefficiency, allowing people to focus on what truly matters instead of repetitive tasks.

To achieve this, I focus on two main areas:

- **KPI Dashboards:** I analyze existing processes, define key metrics with the client, and design dashboards that provide clear, actionable insights.
- **Python Automation:** I develop customized scripts and automated solutions that solve specific problems, streamline workflows, or perform tasks such as automated testing.

The result is a set of tailored tools and dashboards that save time, reduce errors, and increase efficiency. Organizations gain transparency, clarity, and the ability to make better-informed decisions, supported by both insightful dashboards and practical automation solutions.

## Projects and Experience

10/2025 - 10/2025

**ID Photonics GmbH**

Automation & Software Developer

**Automation of Customer Form Data Processing**

### Responsibilities:

- Designed and implemented a Python automation to replace a fully manual data-transfer workflow.
- Developed a script that processes incoming customer form submissions sent to a central email address.
- Parsed email content to extract customer data and automatically inserted it into the existing Excel tracking file.

- Eliminated the need for staff to log into the WordPress backend, download entries, and manually copy data into Excel.
- Improved process efficiency by reducing manual effort and minimizing human error.

#### Technologies:

- Python: Extracted data from incoming emails and transferred it into Excel automatically.
- SMTP: Used to process and handle incoming emails programmatically.
- Excel: Utilized for structured data collection, organization, and ongoing reporting.

08/2025 - 10/2025

### **Independant Project**

KPI Dashboard Developer

#### **Development of interactive KPI Dashboards**

#### Responsibilities:

- Developed interactive and personalized KPI dashboards tailored to client needs
- Managed a publicly accessible Grafana server for monitoring and visualization of system metrics, including configuration of dashboards, data sources, and secure user access.
- Integrated data from different datasources for real-time visualization
- Focused on usability, clarity, and actionable insights for stakeholders

#### Technologies:

- Grafana: Collected data via Prometheus, MySQL and other datasources to visualize it through interactive Grafana dashboards
- VPS & Ubuntu Server: Linux and Networking administration to deploy and maintain Grafana dashboards with HTTPS and authentication.
- Plotly Dash & Python: Used to generate interactive KPI dashboards
- Different Datasources as Prometheus, MySQL or Excel: Structuring and retrieving data

08/2025 - 09/2025

### **ID Photonics GmbH**

AI Engineer

#### **Development of a Customer Support Chatbot**

### Responsibilities:

- Configuring a botpress chatbot for efficient and user-friendly customer support
- Designing the chatbot's workflow and logic
- Compiling and organizing an appropriate knowledge base
- Configuring the chatbot's basic behaviors
- Selecting the LLM model

### Technologies:

- Botpress: Designing the bot's workflow, configuring its instructions and picking a suitable LLM model
- ChatGPT: used as the Bots LLM model

02/2025 - 09/2025

### **ID Photonics GmbH**

Automation & Full Stack Software Developer

### **Code-to-Documentation Automation**

### Responsibilities:

- Building a standardized automated documentation process across multiple products based on code comments which made the documentation process more efficient and accurate
- Automated creation of structured tables in docx format based on code annotations
- Generating Excel files containing extracted data for analysis and documentation purposes
- Automated the end-to-end process of code documentation, improving efficiency and accuracy
- Ensured consistency and readability of generated documentation across multiple formats

### Technologies:

- Python: Automation of the documentation process by transforming code comments into a documentation
- Pandas: Creating Excel tables for documentation purposes automatically
- Excel: Automation of storing documentation informations
- Word: Automated creation of user manual tables
- SVN: Syncing and managing files and releases

10/2022 - 01/2025

## **ID Photonics GmbH**

Automation & Full Stack Software Developer

### **Development of an automated Laser Test Script**

#### Responsibilities:

- Building of a driver to communicate with lasers using Python and SCPI
- Development of an test automation Python script to facilitate and automate the laser testing process
- Implementing a GUI for the test program with PyQt5
- Automated creation of test reports for customers
- Creating an interface with MySQL and SQLite databases
- Writing a clear, comprehensive documentation in Latex, HTML and Markdown
- Interfacing with P-Touch label printers
- Establishing an automated connection by configuring a WireGuard VPN tunnel

#### Technologies:

- Python: Building drivers and Scripts for Test Automation
- Datetime Module: Logging purposes, calculating time limits
- Threading Module: Running multiple GUI windows simultaneously
- Numpy Module: Calculating step size and limits of tests
- Pandas Module: Manipulating and building Excel files using Python
- Shutil Module: Managing files and directory trees
- Sftp Module: Storing and maintaining files on embedded linux systems
- Pdkit Module: Converting HTML files to PDF format; automated creation of PDF files
- Subprocess Module: automated execution of cmd and terminal commands
- ctypes Module: Programming FTDI Chips by manipulating and using DLL files using Python
- XML Module: Generating XML trees to structure data
- Wireguard Module: Automation for creating and configuring a wireguard VPN tunnel using Python
- OS Module: Automation of operating system specific tasks using Python (e.g. saving images)
- Sys Module: Manipulating the specific system's paths using Python
- JDSU.FIT.FiberChek.Automation Module: Test Automation of fiber checking processes using Python and a Viavi microscope

- PyQt5: Building a complex multithreading GUI application
- SQLite Module: Saving test data locally in a database with Python
- MySQL Module: Syncing and maintaining test data over multiple systems
- BPAC: Automated printing of labels using P-Touch printer
- SCPI: Communicating with lasers
- Remote Desktop Protocol (RDP): Enabling remote testing
- Latex: Creating flowcharts to document test procedures
- Markdown: Writing user friendly documentations
- HTML: Creating fully automated test reports
- SVN: Syncing and managing new releases and development trunks

03/2022 - 09/2022

## **University of Applied Sciences Munich**

Tutor

### **Tutor for Technical Computer Sciences**

#### Responsibilities:

- Teaching students in Python and C
- Instructing students in fundamental programming concepts
- Creating programming exercises for students
- Managing a Git repository for student exercises

#### Technologies:

- Git: Maintaining a repository with exercises and solutions for students
- Markdown: Developing tasks and exercises to reinforce fundamental and object-oriented programming principles

08/2021 - 02/2022

## **Cirrantic GmbH**

Full Stack Software Developer

### **Maintaining an Apple CarPlay and AndroidAuto project**

#### Responsibilities:

- Maintaining an Apple CarPlay / AndroidAuto application that leads users to EV charging stations and facilitates the charging process
- Conceptualizing a user-friendly GUI which can be interacted with while driving
- Emulation of applications on smartphones to simulate the resulting program

Technologies:

- Android Studio: Development environment to build AndroidAuto applications in Kotlin and simulate them on a smartphone emulator
- XCode: Development environment to build Apple CarPlay applications in Swift and simulate them on a smartphone emulator
- Git: Efficient code integration and collaboration
- Kotlin: Used to program AndroidAuto applications
- Swift: Programming language of Apple necessary to develop CarPlay applications

05/2021 - 08/2021

**Cirrantic GmbH**

Full Stack Software Developer

**App & Web Development**

Responsibilities:

- Connecting Back- and Frontend processes
- Designing Frontend/GUI elements
- Integration of cookies

Technologies:

- HTML/CSS/Javascript: Building of responsive and user friendly websites
- Postman: Configuring and maintaining API calls
- Git: Efficient code integration and collaboration
- PHP: Organizing the backend and sending data to the frontend

03/2021 - 05/2021

**Cirrantic GmbH**

Software Developer

**Voice Assistant Skill Development (Amazon Alexa)**

Responsibilities:

- Developing of an Alexa Skill which helps users to find EV charging stations
- Configuring intents, slots and utterances to handle user queries effectively
- Optimizing Skill performance and responsiveness for seamless user experience
- Analyzing user feedback and logs to improve Skill functionality and engagement

Technologies:

- Alexa: Training Alexa to help customer efficiently
- Alexa Skills Kit: Building an Alexa Skill from scratch

# Skills

## Data Visualization

- Grafana
- Dash
- Numpy
- Matplotlib
- PyQt
- PyGraph

## Automation

- Test Automation
- Documentation Automation
- Process Automation
- Workflow Automation
- Continuous Improvement

## Networking

- SFTP
- VPN
- Wireguard
- RDP
- FileZilla
- WinSCP

## Software Development

- OOP
- Test-Driven Development
- Unit Testing
- Integration Testing
- Documentation
- Full Stack Development
- Development of Drivers
- AI Engineering

## Data Analysis

- Prometheus
- Pandas
- Numpy
- Excel
- Dash

## Database Management

- SQL
- SQLite
- MySQL
- Prometheus

## Programming Languages

- Python
- C
- C++
- Ruby
- PHP
- Kotlin
- Swift

## Web Development

- HTML
- CSS
- JavaScript
- REST APIs
- XAMPP
- MAMPP
- Flask
- FastAPI
- CORS

## Version Control & Collaboration

- Git
- GitHub
- GitLab
- SVN
- Agile
- Scrum

## System Administration

- Virtualization
- Docker
- Oracle VirtualBox
- KVM/QEMU
- VPS
- VMware
- Hyper-V
- Linux
- Linux Servers

## Operating Systems

- Ubuntu
- Arch Linux
- Void Linux
- Windows
- MacOS

## Soft Skills

- Problem solving
- Analytical Thinking
- Agile Project Management
- Effective Communication & Collaboration
- Time Management & Deadline Orientation
- Continuous Learning & Adaptability
- Stakeholder Management
- Simplifying Complex Concepts

## Educational Background

10/2022 - 09/2025	<b>Philosophy (Bachelor of Arts)</b> Ludwig-Maximilians University Munich Grade 1.2
03/2019 - 09/2022	<b>Electrical and Information Technology (Bachelor of Engineering)</b> University of Applied Sciences Munich Grade 1.8
09/2010 - 06/2018	<b>Abitur</b> Rainer-Maria-Rilke Gymnasium Icking Grade 1.2

## Languages

German

English