



# MD AKIB HASAN

SOFTWARE DEVELOPER    📍 KÖLN, GERMANY    ☎ 017664369076    [PERSONAL WEBSITE](#)

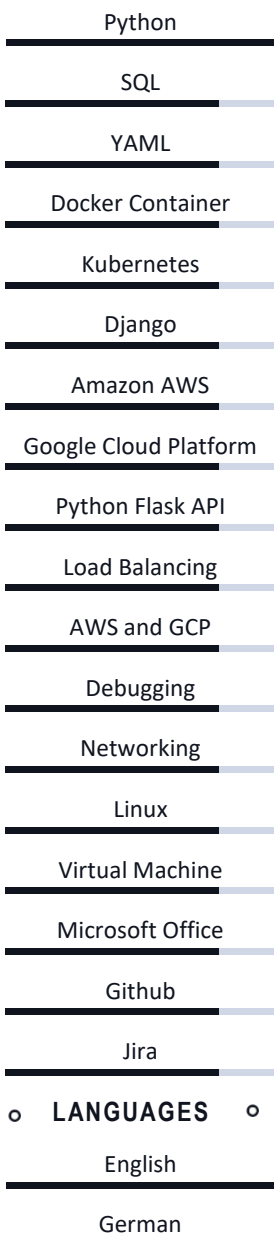
## ◦ DETAILS ◦

Köln, Germany  
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[ahratul740@gmail.com](mailto:ahratul740@gmail.com)

## ◦ LINKS ◦

[LinkedIn](#)  
[Github](#)

## ◦ SKILLS ◦



## ◦ LANGUAGES ◦

## 👤 PROFILE

Able to effectively self-manage during independent projects and collaborate in a team setting. A creative thinker, adept in software development and working with various data structures.

## 📁 EMPLOYMENT HISTORY

### Internship in Data Analyst at xarvio® Digital Farming Solutions, Köln.

October 2021 — December 2021

- Cleaned unstructured data for data analysis and Confidential tasks and pipelines.
- Analyzed over 22 years of data (2000-2022) to make a Dose Response model.
- Used Python and the Soil API to get raw data and reprocessed it for a data science task.
- Used Natural Language Processing ML libraries to train a Robust Regression model for nonlinear data analysis.

### Working Student Software Developer at xarvio® Digital Farming Solutions, Köln.

January 2022 — August 2022

- Proficient in creating high-volume microservices and APIs.
- Expertise in Django, Python, and Python application frameworks like Django REST, Flask, and Fast API
- Proficiency with database frameworks like PostgreSQL.
- Working with serverless Amazon Web Services (AWS) technologies Like Lambda.
- Proven track record with testing, editing, and debugging web apps.

### Working Student Software Developer at Resolve Biosciences GMBH, Monheim.

November 2022 — February 2023

- In Apache Airflow, are defined as Directed Acyclic Graphs (DAGs), where nodes represent tasks and edges represent dependencies between tasks.
- Tasks are instances of operators. You define them within a DAG, and they represent the individual units of work.
- Utilize Jinja templating and macros to parameterize your DAGs, making them more flexible.
- Proven track record with testing, editing, and debugging web apps.

### Master's Thesis Student at Fraunhofer Institute for Production Technology IPT, Aachen.

April 2023 — October 2023

- Developed and successfully implemented a novel cyber-attack detection system utilizing Long Short-Term Memory (LSTM) neural networks in conjunction with side sensor data from CNC machines.
- Demonstrated a deep understanding of cybersecurity principles and the ability to apply cutting-edge machine-learning techniques to enhance the security of critical industrial systems.

## 🎓 EDUCATION

**Master's in Communication System and Networking, Technische Hochschule Köln, Köln**

April 2020 — Present

Mathematics, Statistics, Machine Learning, Network Security, Communication Systems, Signal Processing, Cloud-based Software Systems, Reliable Systems, Programming in C and Python, Database Systems

**Bachelor of Science in Electronic and Electrical Engineering, American International University-Bangladesh, Dhaka, Bangladesh**

May 2015 — February 2020

- Digital Design with System Verilog, VHDL and FPGAs
- Microwave Engineering

## 📄 REFERENCES

**Dr. Holger Hoffmann from xarvio® Digital Farming Solutions, Manager Teams Weed Management & Crop Modelling.**

holger.hoffmann@xarvio.com ,

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**Lars Leyendecker from Research Associate and Doctoral Student at Fraunhofer IPT and RWTH Aachen.**

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## ★ PUBLICATION

**Electrical and Signal Processing Techniques, ICREST, IEEE, Dhaka, Bangladesh**

November 2018 — January 2019

"Unmanned Aerial Vehicle for Cleaning the High-Rise Buildings." . [Link](#)