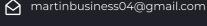
MARTIN MOHAMM<u>ED</u>

SOFTWARE ENGINEER



CONTACT





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www.martin-mohammed.info

LANGUAGES

German | native English | fluent Spanish | basic

EDUCATION

- B.Sc Informatik | Technische Universität München
- Abitur (Ø 1.2) | Gerhart-Hauptmann-Schule, Germany

SKILLS

• Programming Languages: C++, C#, Java Python3, JavaScript / TypeScript, Swift, Bash / Shell Scripting, ...

• Data Science & AI / ML Tools: Tensorflow, Keras, Pytorch, OpenCV, Numpy, Pandas, Scipy, ETL / ELT Pipelines, Apache Spark, Roboflow, Jupyter Notebooks & Google Colab, ...

· Robotics & Simulation

ROS2, Gazeboo, Unity, telemetry, flight-controllers, embedded software, UAV, autonomous systems, ...

Computer Vision

State of the art (SOTA) Object Detection YoloV8 &, YoloNas, Object Tracking, Image Segmentation, Odometry & Visual Servoing











WHY I AM THE PERFECT FIT FOR YOUR COMPANY

I have had the privilege of working with various renowned international companies, as evidenced by the company logos displayed above.

Currently, I am engaged as a **freelancer with two active clients**. Firstly, I collaborate with **58agents GmbH**, an IT consultancy founded by former PwC management employees. Here, I serve as an IT consultant, specializing in software engineering. Additionally, I am involved with **Tytan Technologies**, where we spearhead innovation in deep-tech and aviation, developing cost-effective anti-drone solutions utilizing **Robotics & Al and Computer Vision**. In this capacity, I focus primarily on computer vision and machine learning models as an IT consultant for data science.

Moreover, I have a **proven track record** of excelling in acquiring new projects, effectively engaging with clients, and driving net profit growth for organizations. I firmly believe that my extensive consultancy experience and profound technological expertise make me the ideal candidate for your company.

EXPERIENCE (FULL-TIME)

IT CONSULTANT FOR SOFTWARE ENGINEERING

TYTAN Technologies GmbH, Munich | Since 02/2024

 TYTAN Technologies innovates in deep-tech and aviation, crafting costeffective anti-drone solutions through Robotics & Al and Computer Vision.

Worked on:

- · State-of-the-art computer vision for object detection and tracking
- · Enhanced UAV software architecture utilizing ROS2
- Implemented edge-device integration with platforms like Raspberry Pi and Jetson Nano
- · Embedded Software for Flight Controller PX4, Micro-Controllers
- · Sensor Fusion Extended Kalman Filter
- · Conducted 3D simulation using Unity and Gazebo
- Utilized CAD Design and electrical engineering for hardware integration into UAV systems

IT CONSULTANT FOR DATA SCIENCE

58agents GmbH, Frankfurt am Main | Since 06/2023

• **58agents GmbH**, an IT consulting firm founded by former PwC employees.

Worked on:

- Client projects at PricewaterhouseCoopers (PwC) for DevOps and Machine Learning, enhancing Kubernetes resource deployment using Helm Charts and utilising (Deep) Neural Networks for regression and classification problems.
- Business Development: Established a new department for Artificial Intelligence & Machine Learning solutions to be offered to clients.
- Developed an ETL pipeline for Horizon and analyzed over 2 million rows of transactional data for evaluation and machine learning training.

SOFTWARE ENGINEER & PRODUCT OWNER

IBM, San Francisco, Frankfurt am Main | 03/2023 - 06/2023

 IBM, a global technology giant and early pioneer in computer development.

Worked on:

- Collaborated with the R & D Team for Artificial Intelligence to research and develop AI systems for detecting IT security vulnerabilities and flaws in IT systems using Big Data and Reinforcement Learning.
- Contributed to an IoT & AI project aimed at establishing a watering system for over 10,000 plants at IBM's branch in San Francisco, CA.

Edge Computing, Microcontrollers & IoT

Nvidia Jetson Nano Orin, Rasperry Pi 4B, Rasperry Pi Pico WH, Arduino Uno R3, Arduino Nano, ESP32, Arduino Cloud, Bluetooth, WiFi, RFID, etc.

· Computer Aided Design (CAD)

Autodesk Fusion 360

Operating Systems:

Windows, MacOs, Linux (Ubuntu, Debian, Kali Linux, Arch Linux & Kali Linux)

· Cloud technologies:

GCP, AWS, MS Azure, Kubernetes, Helm, Docker, CDK, SST, ...

• Build & CI/CD:

Gitlab CI, AWS DevOps, Github Actions, NPM, Yarn, ...

· Frontend technologies:

Angular 2+, React, Next.js, Vue, SST, LESS/SASS/SCSS, ...

· Backend technologies:

Node.js, Express.js, Django, Flask, REST API, GraphQL, Webhooks

· Database & Tools:

PostgreSQL, MongoDB, MySQL, AWS DynamoDB

Version Control:

Git, Github, Gitlab, ...

· Methods / Paradigms:

Product Owning, DevOps, Continuous Delivery, Agile Coaching, SCRUM, Kanban

SPECIALIST

Apple, Frankfurt am Main | 01/2023 - 03/2023

 Apple, a multinational company renowned for its consumer products and early innovations in personal computing, mobile phones, and more.

SOFTWARE ENGINEER

Digital David AG, Frankfurt am Main | 06/2022-01/2023

 Digital David AG, a subsidiary of The Digital Workforce Group, a consulting- focused holding company specializing in training young professionals for the industry.

SOFTWARE ENGINEER

IT Blox GmbH, Frankfurt am Main | 10/2020 - 06/2022

• IT Blox GmbH, a startup specializing in customized IT solutions for clients, founded by a former BASF employee.

CUSTOMER ADVISORY

Sparkasse, Darmstadt | 02/2018 - 03/2019

 Sparkasse is a retail bank offering a diverse range of products tailored to both retail clients and companies.

FURTHER QUALIFICATIONS

UNSUPERVISED LEARNING, RECOMMENDERS, REINFORCEMENT LEARNING

DeepLearning.Ai | Since 03/2024

 DeepLearning.AI is an education technology company that is empowering the global workforce to build an AI-powered future through world-class education, hands-on training, and a collaborative community

+28 CERTIFICATES ON LINKEDIN

Udemy, LinkedIn Learning & Coursera

More Certificates involving Topics as:

 Data Structures & Algorithms, C++, Front-end development, back-end development, Full-stack development, Data Science, Data Analysis, AI / Machine Learning / Deep Learning, Simulation Software, DevOps & Cloud Technologies, IT-Security, etc.

ACHIEVEMENTS

HackerRank

TOP 0.5% OF 7+ MILLION USERS HACKERRANK C++ COMPETITIVE PROGRAMMING

 HackerRank is a programming practice platform that provides competitive challenges and tests for learning skills and preparing for technology careers.

TryHackMe

TOP 0.3% OF 2.6+ MILLION USERS TRYHACKME IT-SECURITY / ETHICAL HACKING

• **TryHackMe** is a browser-based cyber security training platform, with learning content covering all skill levels from the complete beginner to the seasoned hacker.

BWINF - National Competition for Computer Science

PODIUM OF COMPETITION - TOP 3 FINISHERS REPRESENTING HESSEN

 BWINF is an annual nationwide competition for students since 1980, aimed at fostering interest in computer science and promoting application-oriented thinking.