

# Mohamed Bousselmi



Senior C++ Software Engineer  
AI Engineer · SaaS Founder

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01 PROFILE

Senior software engineer and founder working across embedded systems, native C++, connected devices, backend platforms, AI systems and complete SaaS products. I combine hardware-aware engineering discipline with product strategy and end-to-end production ownership.

02 SELECTED EVIDENCE

Top 5%

C++ skills assessment

108 / 980

Engineering selection rank

2 ecosystems

Google + Microsoft calendar product

Hardware → AI

End-to-end engineering depth

03 EXPERIENCE

CURRENT  
MUNICH

FOUNDER & PRODUCT BUILDER

AI and SaaS products

- SlotFlow:** scheduling SaaS with C++ services, PostgreSQL, OAuth, Google and Microsoft calendars, Stripe, SES, S3, public booking and administration.
- Coach for Life:** privacy-first adaptive planning product with explainable, human-confirmed AI guidance.

AI orchestration · C++ · PostgreSQL · Docker · Flutter · Product strategy

FROM 2021  
MUNICH

ELMATRIX & NOVEL GMBH

C++ / Qt product engineering

- Designed a C++/Qt network simulator and receiver using TCP/UDP, data processing and sensor-dependent 2D visualization.
- Developed USB/FTDI and EEPROM communication libraries with efficient read/write workflows.
- Integrated device communication, synchronized measurements and visualization into customer-facing Qt applications.
- Automated application tests and produced encrypted, installable customer releases.

C++ · Qt · TCP/IP · UDP · USB · FTDI · GitLab · Jira · Testing

04 CORE SKILLS

Languages

C · C++ · Python · SQL · Dart

Native & embedded

Qt · STM32 · ARM Cortex-M · PIC · FreeRTOS · Raspberry Pi · BeagleBone

Protocols

TCP/IP · UDP · USB · FTDI · UART · SPI · I<sup>2</sup>C · MQTT · BLE · Wi-Fi

Product platforms

PostgreSQL · Docker · OAuth · Stripe · AWS SES/S3 · Flutter · REST APIs

Delivery

Architecture · Testing · GitLab · Jira · Observability · Security · Product strategy

2020  
MUNICH

ELMATRIX & NOVEL GMBH · INTERNSHIP

## Embedded integration

- Researched and compared inertial measurement units.
- Integrated an IMU library on an ARM Cortex-M4 platform.
- Developed an FTDI USB bridge communicating with EEPROM through SPI and embedded communication libraries.

ARM Cortex-M4 · FreeRTOS · USB · FTDI · SPI · I²C

2019  
TUNISIA

STMICROELECTRONICS · INTERNSHIP

## Bootloader test tooling

- Designed the architecture and flow of a C++/Qt application generating JSON-based bootloader test files.
- Modeled variable test-case templates in a graphical interface and tested the application with Google Test.

C++ · Qt · JSON · Google Test · Bootloaders · UART · SPI · I²C · Flash

2019  
TUNISIA

CODINTEK & CIIP LAB, ENIT

## Applied IoT systems

- Developed an IMU-based embedded system with BLE and Raspberry Pi dashboarding for livestock monitoring.
- Built an energy monitoring workflow using Raspberry Pi, Node-RED, MQTT and Emoncms.

Embedded C · Raspberry Pi · BLE · Node-RED · MQTT · Emoncms

05 EDUCATION

2017–2020

### Electrical Engineering

National Engineering School of Tunis

Embedded systems · Electronics · PCB design · Signal processing · EUR-ACE

2015–2017

### Engineering Preparatory Studies

Preparatory Institute of Nabeul

Competitive selection rank: 108 / 980

06 CREDENTIALS

### C++ Assessment

LinkedIn technical assessment

Top 5%

### Languages

English · French · German

Professional multilingual environment

07 BEYOND ENGINEERING

### Endurance sport

Triathlon · Cycling · Running

Munich Marathon 2022 · Shell Eco-marathon London participant