



Enis BILICAN

Vision, AI & Embedded Systems Engineer

7+ years turning **business needs** into industrial vision, AI and embedded solutions. Combining hands-on development from scratch with **end-to-end** engineering, taking new solutions from **concept** to **production** and **optimizing** existing systems.

- French citizen
- Worldwide mobility
- Born in 1998
- Driving licenses B and A

PROFESSIONAL EXPERIENCE

Embedded Software & Vision Engineer, FN Herstal

Belgium | 04/2025 - Present and 01/2023 - 10/2023

Safety-critical mechatronic system combining embedded software, vision and electromechanical hardware.

- ✓ Built a **C++/Qt HMI prototype** and contributed to **Ansys SCADE Display** implementation.
- ✓ Integrated **camera/AI processing** and **CAN/TCP/IP interfaces** in C++ and Python.
- ✓ Supported **Linux/Yocto deployment**, **hardware integration**, UAT and troubleshooting.

AI Project Engineer / Vision & IT Lead, Takeda

Belgium | 04/2024 - 04/2025

17-station **Automatic Visual Inspection** (AVI) system with **GPU-based AI** and Stäubli robotic handling for biological products.

- ✓ **Led Vision & IT workstreams**, supplier reviews and validation preparation.
- ✓ Reviewed vision algorithms, camera/lighting settings and false-reject performance.
- ✓ Sized **GPU infrastructure** and specified AWS storage and manufacturing interfaces.
- ✓ Delivered HALCON/Spot vision POCs and 6-camera real-time line monitoring.

R&D Machine Vision Engineer, ArcelorMittal

Luxembourg | 10/2023 - 04/2024

2D/3D inspection and LiDAR R&D for steel production lines; solutions deployed in production.

- ✓ Developed Python/OpenCV **metrology**, **stitching**, **calibration** and camera-LiDAR fusion.
- ✓ **Built C++ point-cloud processing** and a **RTSP server** (22,000×1,080 pixels).

AI & Machine Vision Trainer, HSO, GSK, Otofacto

Geneva, Belgium | 01/2021 - Present

- ✓ Delivered **applied training** in **machine vision** (25 participants). **AI defect detection** (12 pharma engineers). **AI deployment** (21 participants, 3 days). ChatGPT, Copilot and workflow-automation workshops.

Earlier experiences:

- **GSK: Machine Vision & Automated Inspection Engineer** | 03/2022 - 12/2022
- **AGC: Software, 3D Vision & LiDAR R&D Engineer** | 10/2021 - 02/2022
- **Pasquier: Machine Vision & Software Engineer** | 09/2020 - 10/2021

EDUCATION

Master's degree in Industrial Engineering

University of Lille, Sciences and Technologies | 2019 - 2021

Industry 4.0: automation, robotics, programming, AI, IoT and industrial vision. **Valedictorian**.

BSc in Electronics & Automation

University of Lille, Sciences and Technologies | 2016 - 2019

Core disciplines: **electronics**, **electrical engineering**, energy and **automation**.

SKILLS

Software Development

C/C++, Python, C#, Qt, GStreamer, FFmpeg, Boost

Machine Vision & AI

OpenCV, Halcon, PyTorch, TensorFlow, OCR, 3D points clouds

Embedded Systems

Linux, Yocto, SCADE, CAN, TCP/IP, BLE, HW/SW integration

Inspection & Integration

AVI, Cameras, Optics, Lighting, LiDAR, calibration, sensor fusion, robotics

Engineering & Validation

System architecture, Specs, ICD, V&V, UAT, GMP, IQ/OQ/PQ

DevOps & Project Tools

MS Project, Draw.io, Power BI, AWS, Git, Docker, GitHub Actions, Jira, Confluence

LANGUAGES

English

TOEIC 870/990

French

Native

Turkish

Fluent

PROJECTS

- **Flask web platform**: end-to-end development in VPS deployment.
- **AI agent harness**: self-hosted AI infrastructure and workflows.
- **Smart-home & private cloud**: IoT integration, automation and NAS-based self-hosted services.
- **Connected mask prototype**: embedded ESP32 control, BLE communication and Android application.