

Wais Abawi

Engineering leader & entrepreneur — building *intelligent machines*

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Berkel en Rodenrijs, NL

● PROFILE

Engineering leader in **robotics, embedded software and AI**. At Lely I grew from embedded software engineer to **Lead Engineer Embedded Software** and **Product Owner** for autonomous agricultural robots, developing and launching the next-generation compute modules for all Lely robots and leading a team that grew from 7 to 11 engineers. Today I co-own Motion Dynamics, where I build the complete software stack for industrial machines using **multi-agent AI workflows** with strict review and test gates.

I started in aerospace (Airbus A380, A400M, Fokker NH90), then studied how technology drives human development (Innovation Sciences, TU Eindhoven) and worked in Kabul to help Afghanistan, my country of origin. It taught me what I lead by: **progress depends on people sharing one goal**.

● EXPERIENCE

Nov 2025 - now **Co-owner** · Motion Dynamics B.V.
Alphen aan den Rijn · started during notice period at Lely
Co-owner and lead software engineer of an industrial automation company: the complete software stack from embedded firmware and secure Linux to cloud, developed with multi-agent AI workflows gated by review and tests.

Oct 2020 - Dec 2025 **Lely** · 5 years 3 months
Maassluis · autonomous systems for agriculture

Lead Engineer Embedded Software 2024-2025

Product Owner 2023-2025

Embedded Software Engineer 2020-2024

- Shipped the upgraded **Central Unit** as a senior engineer in a team of 4.
- As Lead Engineer and PO, developed the **next-gen compute modules for all Lely robots** (Machinery Regulation, CRA, NIS2): the platform behind **AOS-2** in the **Astronaut A5 Next**.
- Grew the team from 7 to 11 engineers (2 hires, 2 transfers) as line manager and tech lead.

C++ · embedded software · autonomous systems

● FOCUS

Physical AI & machine vision

Autonomous robots, computer vision, edge ML

AI-native engineering

Multi-agent AI coding workflows with review and test gates

Hands-on C++ engineer

Embedded and machine software

Engineering leadership

Team of 7 → 11; line manager, tech lead and PO

● SKILLS

C++ (main language)

Claude Code · AI agents

MCP Local LLMs

Computer vision Edge ML

Control systems

Embedded Linux · Yocto

Secure OTA CAN bus C

Python FastAPI

React · TS PostgreSQL

GitLab CI/CD

Machinery Reg. · CRA · NIS2

Robotics · ROS

Motion control

Product ownership Scrum

Qualification

● EXPERIENCE (CONTINUED)

Mar - Oct 2020	CTO (remote) · ACGAS, Malaysia Composite LPG cylinders; COVID-19 stopped the relocation and most of the work
Feb 2018 - Mar 2020	Software Engineer · Alten Nederland Capelle aan den IJssel · engineering consultancy — GS1 — data pipelines — Alstom — dashboard for the Rotterdam metro
Jun 2015 - Feb 2018	Software Engineer · ALE Delft B.V. — Machine software for motion control in C++ — Front-end software for operators (Windows application) <code>C++</code> · <code>motion control</code> · <code>machine software</code>
Oct 2014 - Jun 2015	MSc thesis, Innovation Sciences · TU Eindhoven Worked on my thesis; not completed — returned to engineering
Apr - Oct 2014	Data Analyst · Airborne Oil & Gas IJmuiden Statistical analysis of the production process for offshore composite pipelines.
Sep 2013 - Mar 2014	Project Development Assistant · Ministry of Public Works / World Bank Kabul, Afghanistan Helped set up the Infrastructure Development Cluster Secretariat, coordinating infrastructure development across five Afghan ministries.
2011 - 2014	Pre-master and MSc programme, Innovation Sciences · TU Eindhoven How technology drives human development; Erasmus exchange in International Relations at METU, Ankara (2013). Interrupted before the thesis to work in Kabul.
Jun 2009 - Sep 2011	Stress, Qualification & Configuration Engineer · Global Technics Leiden — Airbus, Hamburg — stress analysis A380 — Airbus, Hamburg — stress tests A400M — Fokker Aerostructures — qualification engineer, NH90 — Fokker Aerostructures — configuration management, NH90
2007 - 2009	Graduation & internship · Airborne Composites · Erasmus MC Smart materials on helicopter rotor blades; predictive blood-vessel model in SEPRAN

● EDUCATION

MSc programme Innovation Sciences

Eindhoven University of Technology · 2012–2015 · thesis not completed

Pre-master, Technische Innovatiewetenschappen

Eindhoven University of Technology · 2011–2012

Erasmus exchange, International Relations

Middle East Technical University · 2013

BSc Aerospace

Hogeschool INHOLLAND · 2005–2009

HAVO, Nature & Technology

Sint-Laurenscollege · 1999–2004

● CERTIFICATIONS

Professional Scrum Product Owner I

Scrum.org

Professional Scrum Master I

Scrum.org

Professional Agile Leadership — EBM

Scrum.org

Developing SQL Data Models

Microsoft · Exam 768

Analyzing & Visualizing Data with Power BI

Microsoft · DAT207x

● LANGUAGES

Dutch

Native

English

Full professional

Dari

Limited working