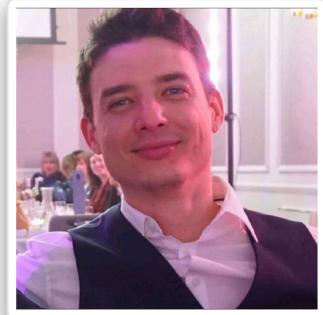


formerly Werner Thomassen Andrade

Werner M. Thomassen

Senior Embedded Software Engineer



Flight software for LEO satellites, autonomous UAVs, humanoid and ground robots. 7+ years in embedded C, Linux/Yocto, and PCB design across space, defence, and robotics.

About Me

Embedded software engineer with 7+ years across the space, defence, and robotics industries. I build flight software for LEO satellites at Spire Global, and have previously developed firmware for autonomous paraglider drones, humanoid robots, and autonomous mining vehicles. My work spans the full embedded stack – from Yocto and embedded C on Linux to bare-metal microcontrollers (ARM, STM32) and custom PCB design. I hold dual citizenship from Belgium and Brazil.

Bio

 **Total Experience**

16 yrs 4 mos

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 **Phone**

+44 07367197699

 **Address**

Ruchill, Glasgow
Scotland, UK

 **GitHub**

github.com/wandrade

 **LinkedIn**

linkedin.com/in/werner-thomassen-andrade

 **Website**

wernermt.com

Professional Skills

LANGUAGES & TOOLS

C / Embedded C

Python

C++

Matlab

JavaScript

Software Architecture

Parallel Programming

Git / Mercurial

Docker

ROBOTICS & AI

ROS

Autonomous Vehicles

Robotics

AI / ANN / Fuzzy Logic

Computer Vision

Simulation (Gazebo, V-REP, Unreal)

QT & GUI Development

EMBEDDED SYSTEMS

Microcontrollers (ARM, STM32, ATMEL)

ARM Architecture

FreeRTOS

Embedded Linux

Yocto

Serial Protocols (CAN, I2C, SPI, UART)

GPS / RTK / RF

FPGA

HARDWARE & PROCESS

PCB Design & Manufacturing

3D Modeling & Printing

SolidWorks

Productization

Scrum & Agile

Jira / Confluence

Project Management

Work Experience

Senior Embedded Software Engineer at Spire Global

Aug 2025 - Present

- Lead embedded software architecture across the full LEO satellite fleet
- Drive Yocto-based build systems and embedded C development for flight software
- Design modular architecture patterns that increase code reuse and streamline engineering effort for new satellite builds and mission adaptations

Embedded Software Engineer at Spire Global

Mar 2023 - Aug 2025

- Developed embedded C and Linux flight software for the entire LEO satellite fleet, including the Deloitte-1 mission
- Built internal software architecture improvements for scaling and modularity across the codebase
- Reduced engineering effort required to adapt code for new satellite builds and projects

Senior Robotics Embedded Systems Engineer at Animal Dynamics

Dec 2021 - Mar 2023

- Tech lead for the 25 kg class paraglider drone – embedded architecture, PCB design, and firmware across the full development cycle
- Delivered a flight-ready platform used in defence mapping operations
- Ensured compliance with aerospace and military standards throughout development

Robotics Embedded Systems Engineer at Animal Dynamics

Mar 2021 - Dec 2021

- Developed long-range autonomous drones for cargo payloads up to 150 kg
- Designed and tested custom PCBs and integrated off-the-shelf avionics
- Ensured full compliance with aerospace and military regulations throughout the hardware development lifecycle

Robotics and Embedded Engineer at Engineered Arts LTD

Dec 2019 - Feb 2021

- Developed embedded systems for humanoid entertainment robots deployed worldwide
- Programmed STM32 microcontrollers with FreeRTOS for real-time multi-axis control
- Designed custom PCB and driver boards for complex robotic platforms

System Engineer at Alten LTD

May 2019 - Dec 2019

- Managed requirements from high-level client specifications to software development requirements as a systems engineering consultant for Bombardier Transportation (Derby)

Autonomous Vehicles Engineer at Hexagon Mining

Dec 2018 - Feb 2019

- Developed autonomous vehicle software – system diagnostics, report tools, high-precision GNSS, embedded Linux, ROS, and QT GUI
- Left to relocate to the UK

Engineering Intern at Hexagon Mining

Sep 2017 - Dec 2018

- Built Python diagnostic tooling, GNSS/RTK systems, and a mining simulator using Unreal Engine 4

- Developed a Qt5 cockpit UI and a hardware demonstration kit for sales and training, running embedded Linux with ROS

○ Cofounder (3D Printing Startup) at Dimensive

2017 - 2019

- Co-founded a 3D modeling and printing startup – built and maintained printers, fulfilled client modeling requests

○ Cofounder (App Startup) at Sociaid

2015 - 2016

- Co-founded a startup using AI and social media for directional marketing, implementing NLP and automated user verification

○ Technology Developer (Intern) at RSTECH Repair Solutions

2015 - 2016

- Developed maintenance solutions for biomedical equipment in lab and on-site; modernized legacy equipment with new electronics

○ Earlier Career

Cofounder, BugTag (2010–2012) – web design & IT company

Manager, Antonieta Idiomas (2009–2010) – marketing, pricing, operations

Clerk, Antonieta Idiomas (2007–2009) – sales & operations

Education

○ Control and Automation Engineering UFMG, Belo Horizonte

2011 - 2016

Completed a 4.5-year BSc program focused on robotics, artificial intelligence, and embedded systems. Final project: control of a quadruped robot on a low-power processing unit.

Member of Autobotz Robotics competition Team at UFMG

2013 - 2014

Contributed to mechanical, electrical, and computer vision developments within Autobotz, focusing on advancing robotics technologies. [Autobotz website](#)

Organizer, CoRA (Competition of Autonomous Robots) at UFMG

2014


Played a key role in organizing and collaborating on the first edition of the Competition of Autonomous Robots (CoRA).

Scientific Researcher at **PROVANT UFMG** (MACRO Group)

Nov 2013 - Aug 2017

- Autonomous tilt rotor drones – 3D modeling for printing and embedded systems integration (2013–2015)
- Quadrotor indoor localization – Kinect sensors and augmented reality tags (2016–2017)
- Robotics Tournament Monitor – taught robotics to first-year students using Lego Mindstorm and Arduino

Contact

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