

Adam Galecki, Senior Software Engineer

500538078, adam.galecki.workmail@gmail.com

LINKS

[Linkedin](#), [GitHub](#), [Article](#), [Personal Website](#)

PROFILE

Experienced Software Engineer and Founder. My main focus and expertise is around robotics, electric-cars and artificial intelligence.

EMPLOYMENT HISTORY

Nov 2023 — Present

Senior Software Engineer, BMW

Lead and managed integration processes of RSU (remote software update) component which is crucial to ship new software to already existing cars. Work included development in **Python3.12** and **C++20**, improving already existing **CI/CD**, coordinating work of multiple people and communicating with the higher management and stakeholders. I was also responsible for recruiting new colleagues to the team and providing mentorship.

Apr 2022 — Oct 2023

Software Engineer, Volvo

Infotainment Software Download Team:

Engineered a slot syncing mechanism to optimise memory usage and streamline the software update process. Developed component tests for the fallback feature using **pytest**. Created tooling for the software download testing framework. Utilised modern **C++** (including **C++14/17**), Google Test, and the CMake build system for hardware-related tasks, ensuring optimal performance and compatibility. Developed an ECU memory map parser and validator to prevent bugs related to partitioning. Mentored less experienced engineers and provided guidance to ensure their future progress.

Infotainment Platform Testing Team:

Leading development of testing framework in **python** and **pytest** specifically tailored for infotainment platforms, which is set to be open-sourced. Created dedicated flashing components to enable efficient and secure firmware updates to the infotainment system. Developed a device memory and process monitor to track the device state during testing, usage and during **CI/CD** processes. Developing **dockerfiles** to enable testing under the **docker** environment. Delegated specific tasks to appropriate team members, ensuring that project milestones were met on schedule. On boarded new team members, providing them with the necessary training and resources to integrate seamlessly into the team.

Nov 2023 — Present

Founder, Braincast

I am funding **AI startup** with the mission to create duolingo like platform for knowledge found in the internet. We let users create quizzes based on the links and PDFs. The solution is scraping data and using artificial intelligence to create summaries and quizzes to enable next level learning experience.

Business is fully bootstrapped and profitable. Tech stack: **React**, **Typescript**, **Next.js**, **LLMs**, **RAG** (vector database)

Sep 2024 — Oct 2024

AI Software Engineer, Supercast

Creating AI Pets for a Forbes-featured post scheduling platform within the blockchain community.

Scope of work:

- API design and implementation of **LLMs** like Claude and OpenAI using **FastAPI**
- API design and implementation of Image Generation models like FLUX, Stable Diffusion, DALL-E 3
- Creating frontend

Jun 2021 — Mar 2022

Software Engineer, Carrier

Enhancing the distributed access control system and designing a framework for automated testing data synchronisation, resulting in a saving of over 100 hours per regression. Creating a **pytest**-based automated framework for testing the main product line, utilising pure **C** and **Python** for the implementation.

Sep 2019 — May 2021

Junior Software Engineer, Apator Telemetry

Developing on-chip hardware optimized C code for a low-power water metering device, including peripherals such as a real-time clock and an AES encryption module for internal communication between agents. Constructing a desktop application for device configuration utilizing Python and QT5. Setting up a continuous integration automated environment for the device in question.

EDUCATION

Sep 2017 — Jan 2020

Engineering in Control and Robotics, Gdańsk University of Technology

Specialization in Robotics and Mechatronics systems.

SKILLS

C++20

Docker

Linux

CI/CD

Python3.12

LANGUAGES

English

C1

Polish

Native speaker

PRIVATE PROJECTS

ROS-Based Autonomous Robot Development

Overview: Designed and developed a fully autonomous robot leveraging the Robot Operating System (ROS). The robot is equipped with an array of sensors and modules to ensure safe and efficient navigation in various environments.

Hardware Integration: Integrated hardware components including LIDAR, IMU (Inertial Measurement Unit), Encoders, Motors, and Raspberry Pi 3.

Software Development: Integrated software components including ROS Integration, PID controller, Environment Mapping, Path Planning, Navigation, and Sensor Fusion.

Achievements: Successfully demonstrated autonomous navigation in diverse environments with varying levels of complexity and unpredictability.

Personal Website

Overview: Created personal website where I can share my knowledge and thoughts about technology and personal development.

Tech Stack: React, Next.js, Typescript, shadcn/ui, Stripe