

## Contact

alex.brod@gmail.com

[www.linkedin.com/in/alex-brod-41b6b3125](https://www.linkedin.com/in/alex-brod-41b6b3125) (LinkedIn)

## Top Skills

Python

Leading Development Teams

Software Architecture

## Languages

English (Full Professional)

Hebrew (Native or Bilingual)

Russian (Native or Bilingual)

## Honors-Awards

Fast rank promotion

# Alex Brod

People Leader | Software Engineer

Jerusalem District, Israel

## Summary

Experienced engineering leader with a strong technical background and a passion for building high-impact, high-quality solutions. I've led diverse teams across embedded and cloud domains, working on complex systems in fields like IoT and autonomous vehicles.

I have a proven track record of leading teams to deliver high-quality software on time, even in fast-paced and evolving environments. With great learning skills and the ability to quickly adapt to new technologies, I thrive in collaborative settings, love mentoring others, and am deeply committed to driving my team toward success.

---

## Experience

### General Motors

3 years 4 months

#### Software Engineering Team Lead

December 2022 - May 2025 (2 years 6 months)

Herzliya, Tel Aviv District, Israel

Managing and mentoring two teams delivering embedded and cloud-based software solutions for autonomous vehicle systems.

Leading the development of a real-time in-vehicle recording system that captures sensor, perception, and planning data—optimized for performance and data transfer constraints.

Designing and implementing a cloud-based configuration management system from scratch, supporting fleet-wide deployment and accommodating vehicle-specific software and hardware limitations.

Developing core features and data pipelines in an advanced debugging platform using Python, Flask, MongoDB, and NodeJS to support analysis of complex autonomous driving scenarios across development and retail fleets. Significantly improved system scalability—from processing a few terabytes per day to hundreds of terabytes daily.

Driving architectural design and technical leadership in a global environment, collaborating across teams in Israel and the U.S., and aligning with legal and engineering requirements of a large-scale automotive program.

#### Senior Back End Developer

February 2022 - December 2022 (11 months)

Herzliyya, Tel Aviv, Israel

Owning all backend aspects of the application, from architecture to implementation.

Designing the architecture and leading development of a triage application for autonomous vehicles (AV), significantly improving system scalability and efficiency. Built with Python, Flask, MongoDB, and NodeJS, and deployed on Kubernetes in an on-premise environment.

Mentoring junior developers, setting coding conventions, and promoting best practices across the team.

Conducting performance analysis on a core service to identify bottlenecks and propose improvements.

#### Zemingo Group

##### Senior Back End Developer

February 2018 - February 2022 (4 years 1 month)

Herzliya Area, Israel

Designed and developed backend services from scratch using Python (Flask) and Java (Spring Boot), following microservice architecture principles.

Gained experience across a wide range of architectures and use cases, adapting to diverse requirements.

Deployed services on Kubernetes clusters in Google Cloud Platform (GCP), ensuring scalability and reliability.

Integrated services with various data stores and message brokers, including Redis, Firestore, MongoDB, and RabbitMQ.

Performed load testing and performance tuning on Java-based services to identify and resolve bottlenecks at scale.

## Texel

### Back End Developer

November 2020 - November 2021 (1 year 1 month)

Herzliyya, Tel Aviv, Israel

Developed and designed systems based on Flask and Gunicorn deployed on K8S on GCP. Built services from scratch integrating them with Redis and Firestore. As part of the work, I ran load tests on the services to find bottlenecks and optimise them to meet scaling requirements.

## Israeli Military Intelligence

6 years 10 months

### Software Development Team Lead

January 2017 - January 2018 (1 year 1 month)

Leading a software development team to develop Dataflow management framework implemented with Python, Python Flask, Angular 4, Elastic Search, MSSQL and Hadoop. As a team leader I managed my team driving us to succeed to overcome challenges of a new created system and integration with existing technology. I took part in the development of the system and was responsible for the architecture design.

### Software Development Team Lead

February 2015 - January 2017 (2 years)

Leading up to 8 soldiers and 4 civilian Oracle consultants.

Leading development of system responsible for massive data loading from HDFS to Oracle DB, based on ODI and java API

## Project Manager

July 2012 - February 2015 (2 years 8 months)

Managing tasks with wide variety of technological teams , each task involved 2-5 teams

Understanding wide variety of technologies and products such as: ODI, RDBMS, MQ, OSB, BizTalk and "In house" developed software systems

Defined and built the role from ground up understanding the needs of the organization and creating tasks to fulfill them

Was awarded for this role and got the Captain Rank almost a year earlier by Chief intelligence officer (Brigadier General level)

## Product Manager, Control and monitoring system

April 2011 - July 2012 (1 year 4 months)

Worked with dozens operational and development teams , successfully distributing and deploying HP – OM system in the organization

Managed team tasks and customers' requirements to deliver high quality and in time solution

### Israel Defense Forces

Instructor specialized in Telephony and network communication

May 2008 - March 2011 (2 years 11 months)

Commanded and trained hundreds of soldiers , dozens in each course

Full 24/7 responsibility of soldiers needs and professional knowledge

Built and improved professional courses specialized in PSTN switches and network communications

---

## Education

Afeka Tel Aviv Academic College of Engineering

Bachelor of Science (BSc), Computer Software Engineering · (2012 - 2017)

ORT Colleges

Practical Engineer, Electrical and Electronics Engineering · (2006 - 2008)