



## Reza Soleymani

**Title:** **Embedded Software Developer**  
**Education:** Electronic Engineering (Communication Systems)  
**Area of expertise:** Automotive and IoT industries  
**Contact:** Christian Lindgren  
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Reza is an Embedded Systems Software Engineer with over 7 years of experience in the Automotive and Embedded Systems fields. He possesses proficiency in C/C++, Python, Machine Vision, and Embedded Systems. Reza has gained substantial experience by actively working in the automotive and IoT industries, making valuable contributions to diverse projects. His expertise in Embedded Systems extends to various applications, including machine vision and the development of function testers for End-of-Line testing of ECUs, Infotainment systems, and other automotive components. Reza demonstrates a self-motivated mindset, meticulous attention to detail, and a strong ability to work effectively both independently and as part of a team. He is enthusiastic about sharing his best practices and equally receptive to learning from others.

### COMPETENCE

- Proficiency in Programming Languages (C/C++, Python, QT, QML)
- Embedded Software Development
- Problem Solving and Debugging
- User Interface Development
- Communication Protocols
- Cross-compilation
- Creative, Enthusiastic, Driven
- Team Collaboration

### WORK EXPERIENCE

2021.05 - ongoing **SGL Company (IoT), Embedded Systems Software Engineer**  
**Assignment:** Development of Cloud-based Infrastructure for Fire Alert Systems, Access Control and Video Management Systems.

#### Tasks:

- Developing Hardware-in-the-Loop (HIL) tests to assess the safety and performance of the fire alert system.
- Developing a Micro-service to collect the system status using the TCP protocol, based on the requirement Data-Model.
- Designing a Cloud architecture using Service-Oriented Architecture and ZeroMQ, that can handle more than 50 camera and fire alert system.
- Developing a cross-platform user interface using Qt/QML based on Material Design Standard.
- Implementing unit tests for all functions and endpoints.

2017.06 – 2021.05 **Crouse (Automotive), Embedded Software Developer**

**Assignment:** Design and develop applications and tester devices for manufacturing end-of-line and automotive parts.

**Tasks:**

- Designing and developing machine vision systems and function testers based on Embedded Linux for end-of-line testing of ECU, Infotainment and PCB Boards.
- Designing and developing a modern UI for a digital instrument cluster using embedded Linux and Qt/QML, and tested by connecting to the Electronic Control Unit (ECU) using an OBD (On-Board Diagnostics) interface in Qt.
- Designing and developing 3 function tester devices for Automotive Column Levers.
- Developing Indoor Location Service based on UWB modules and STM32.

2015.03 – 2017.06 **Kahroba Company, Embedded Software Developer**

**Assignment:** Development of Flight and Car Simulators.

**Tasks:**

- Developing and designing a 3 Degree of Freedom flight and car simulator using an ARM MCU, motion control, servo motors, and a game engine.

## EDUCATION

2015-2017

**MSc. Electronic Engineering (Communication Systems)**  
**Urmia University, Iran**

**Orientation:** Signal Processing

**Thesis:** Deep Learning-Based Method for Classification of Mental Illness Using FMRI Data and MATLAB.

### LANGUAGES

English ●●●○○  
Persian ●●●●●  
Turkish ●●●●●

### COMPUTER SKILLS

C/C++ ●●●●●  
Python ●●●●●  
Embedded Linux ●●●●●  
QT/QML ●●●●●  
MATLAB ●●●●○  
FreeRTOS ●●●●○  
Tensorflow ●●●○○  
Signal Processing ●●●○○  
OpenCV ●●●●○  
MongoDB ●●●●○  
Git/Gitlab ●●●○○  
Docker ●●●○○  
Javascript ●●●●○

### OTHER

Iranian Driving license, type B