CONTACT

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Ioana Beatrice Iuga

SKILLS

- C/C++ 3 years
- Classic AUTOSAR 3 years
- CANoe Testing 3 years
- EB Tresos ECU Development 3 years
- Git 3 years
- Agile Development 3 years
- GHS Probe flashing & debugging 2 years
- Polarion Test Management 1 year

EDUCATION

West University of Timisoara

BSc in Computer Science

Timisoara, 2016-2019

LANGUAGES

English - Advanced

Romanian - Native

IOANA-BEATRICE IUGA

Senior C/C++ AUTOSAR Developer • Contractor • Freelancer

ABOUT ME

I am a Senior AUTOSAR Developer / Contractor / Freelancer with **4+ years of experience**, only interested in remote work.

I use my expertise to help companies around the world to design and implement high-integrity software solutions.

Drop me a message if you think my expertise could help your organization!

WORK EXPERIENCE

Continental Engineering Services UK

- **Senior C/C++ AUTOSAR Developer**

  Graphics Controller to CAN-Bus communication — Nov 2020 - Present

  The client, a leading provider of automotive software solutions, was struggling with the development of a dashboard for a prototype electric vehicle because it lacked communication between two main components in the system.

  - **Increased from 0 to n CAN-signals being sent from the Graphics Controller to the CAN-Bus** by designing a suitable communication method, using the Automotive Controller as an intermediate.
  - **Maintained the module for over 2+ years** by updating the code base whenever a change occurred in the signal database file, and also by improving the communication method from simple INC to BIF communication.

  Skills: Classic AUTOSAR, C/C++, EB Tresos ECU Development, CANoe testing, Google Unit Testing, GHS Probe flashing & debugging, Git, Jira, SCRUM

- **Senior C/C++ AUTOSAR Developer**

  End-to-End Protection — Jul 2022 - Sep 2022

  The client, a leading provider of automotive software solutions, was struggling with the development of a dashboard for a prototype electric vehicle, dealing with unprotected communication against faults between the Electronic Control Units of the vehicle.

  - **Ensured 100% of the Application Layer's Software Components have access to E2E Protection when communicating with the CAN-Bus**, by integrating a mechanism that offers protection against the effects of faults at runtime to the signals transmitted between the Automotive Controller and the CAN-Bus.

  Skills: Classic AUTOSAR, C/C++, EB Tresos ECU Development, CANoe testing, GHS Probe flashing & debugging, Git, Jira, SCRUM

- **Senior C/C++ AUTOSAR Developer**

  Information Forwarding through Bridge Interface — Aug 2022 - Aug 2022

  The client, a leading provider of automotive software solutions, was struggling with the development of a dashboard for a prototype electric vehicle due to the lack of information transmitted between two microcontrollers.

  - **Assured 180° communication flexibility between the two microcontrollers** by developing an architecture to be the future foundation for transmitting information from the Automotive Controller's Dataset to the Graphics Controller through the Bridge Interface.

  Skills: Classic AUTOSAR, C/C++, EB Tresos ECU Development, CANoe testing, GHS Probe flashing & debugging, Git, Jira, SCRUM

- **Senior C/C++ AUTOSAR Developer**

  Date and Time signals to CAN-Bus — Mar 2022 - Apr 2022

  The client, a leading provider of automotive software solutions, was struggling with the development of a dashboard for a prototype electric vehicle because certain components in the system required to access information provided by the Real Time Clock for synchronization purposes.

  - **Eliminated the information shortage on the system's bus in under 1 sprint** by forwarding the Real Time Clock information to the CAN Bus.
  - **Increased from 0 to 6 CAN-signals being sent from the Real Time Clock to the CAN-Bus** by implementing an algorithm on the Automotive Controller's side that uses the Real Time Clock to provide Date and Time-related signals to the CAN-Bus.

  Skills: Classic AUTOSAR, C/C++, EB Tresos ECU Development, CANoe testing, Google Unit Testing, GHS Probe flashing & debugging, Git, Jira, SCRUM

- **Senior C/C++ AUTOSAR Developer**

  Application Layer Module Removal — Feb 2022 - Feb 2022

  The client, a leading provider of automotive software solutions, was struggling with the development of a dashboard for a prototype electric vehicle, dealing with duplicate modules that were unnecessarily consuming resources.

  - **Reduced and optimized the code base by 10%** by safely eliminating 2 obsolete modules.

  Skills: Classic AUTOSAR, C/C++, EB Tresos ECU Development, CANoe testing, GHS Probe flashing & debugging, Git, Jira, SCRUM

- **Senior C/C++ AUTOSAR Developer**

  Complex Device Driver optimization — Jul 2021 - Jul 2021

  The client, a leading provider of automotive software solutions, was struggling with the development of a dashboard for a prototype electric vehicle, having trouble optimizing the mechanism for transmitting warning telltales to the driver's dashboard.

  - **Reduced complexity of the communication approach by 5% between 2 modules based under the Runtime Environment Layer** by correcting the Complex Device Driver type of connection with the Bridge Interface Module.

  Skills: Classic AUTOSAR, C/C++, EB Tresos ECU Development, CANoe testing, GHS Probe flashing & debugging, Git, Jira, SCRUM

- **Senior C++ Developer**

  Graphics Controller HMI — Jan 2020 - Jun 2020

  The client, a leading provider of automotive software solutions, was providing engineering services to an English luxury sports car manufacturer for the development of a dashboard for their new SUV car. Being in an advanced stage of the project, the client was dealing with unpredicted bugs in their Dashboard Human-Machine Interface.

  - **Closed 70% of the bug tickes from that period related to the Car Dashboard HMI,** by working closely with the testing team and the other developers.

  Skills: C++, CANoe testing, UI Programming & Testing, Git, Jira, SCRUM

Continental Automotive Romania

- **Junior C/C++ AUTOSAR Developer**

  Classic AUTOSAR Internship — Jul 2018 - Sep 2019

The client, a leading provider of automotive software solutions, was developing a Driver Monitoring System on Chip, struggling to finish the implementation by the end of the deadline.

- **Successfully closed 100% of the remaining topics,** by supporting the team with the design implementation, and testing of the features.

Skills: Classic AUTOSAR, C/C++, EB Tresos ECU Development, CANoe testing, Unit Testing, Git, Jira, SCRUM