CURRICULUM VITAE

Personal Information

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Education

2016 - 2018: Master's Degree in Embedded Systems, "Lucian Blaga" University, Sibiu, Romania, Faculty of Engineering - Hermann Oberth

2012 - 2016: Bachelor's Degree in Computer Science, "Lucian Blaga" University, Sibiu, Romania, Faculty of Engineering - Hermann Oberth

2008 - 2012: High School of Mathematics and Informatics "Grup Scolar Economic, Administrativ si de Servicii", Calimanesti, Rm. Valcea

Employment Career – Kendrion NV

November 2022 – present Senior Software Engineer

3 Interior Sound projects – Fisker AVAS Onebox, Seat A2B Innensound and Audi SASGen29

- ➔ Review requirements and documentation to ensure that the individual requirements (functional and non-functional requirements) are testable.
- ➔ Review of the Software Detailed Design (Enterprise Architect tool).
- ➔ Review of the Software Sequence Design (sequence diagrams in Enterprise Architect) and analyze the corresponding source code of the involved interfaces.
- ➔ Create test specification for the software qualification tests, unit tests and integration tests.
- ➔ Create test environments for software unit test level and software integration test level using the VectorCAST tool.
- ➔ Implement and execute software unit and software integration test cases using the VectorCAST tool.
- ➔ Execute software qualification tests using the following main tools: CANoe, IAR Embedded Workbench and J-link debugger.

- ➔ Summarize and communicate the results of the tests (including creation of the corresponding change request tickets).
- ➔ Create/Update Software Qualification/Unit/Integration Test Strategy and contribute to the overall test strategy together with the Test Manager.
- ➔ Participate to the review of the SW Architecture and create the relevant smoke tests.
- ➔ Support for the software deliveries to our testing teams and to our customer.
- ➔ Support for the software qualification tests.
- ➔ Create and maintain the CPU load tests and the BUS load tests.
- ➔ Prepare python scripts for the report generation.

Employment Career – ProIT Sibiu

March 2022 – November 2022 (8 months) Senior Software Engineer
2 Audi projects – DTC (Dynamic Torque Control) and DC(Dumper Control)

- ➔ 2 months of training to learn MATLAB Simulink, Python and TPT (Time Partitioning Testing) and to get the ISTQB Foundation Certification.
- ➔ Performed smoke tests for each release from customer and bug fix releases.
- ➔ Review requirements and documentation to ensure that the individual requirements (functional and non-functional requirements) of the SWRS documents (module, block and software component) are testable and that the requirements do not contain any errors or ambiguities.
- ➔ Review test specification (check also whether the test implementation adheres to guidelines and ensure continuous and advancing quality).
- ➔ Interface consistency check to ensure that modules of a SWC component are correctly integrated (searched errors in the source code: signals of modules are connected incorrectly on the SWC level and the modules are executed in the wrong order on the SWC level).
- ➔ Participated to the review sessions of different test implementation.
- ➔ Performed Integration Tests for each release.
- ➔ Safety/non-safety test mdl file (implementation for the new requirements, updates for every release, interface import, testframe generation, test specification update etc) - focus on the model files, respectively the testing on the target simulation board via Simulink.
- ➔ Code coverage (mainly Decision Coverage type).
- ➔ Black Box Testing for many modules (including Equivalence Class, Requirements Based and Boundary Values).
- ➔ Performed Resource Usage Test to ensure the fulfillment of resource requirements.
- ➔ Safety test obj files - testing on the target simulation board (ensure the correct behavior of the system under test with respect to the processor architecture e.g. size of scalar data types, error handling).
- ➔ Performed Back-to-back comparison (B2B) test between the model and the object on the target used to ensure that the behaviour of the model

with regard to the test objectives is equivalent to the automatically generated objects on the target (MiL - PiL comparison) within a specific tolerance.

- ➔ Performed parameter Validity Check (check that the dataset contains only desired parameter changes).

Employment Career – SII Romania (5 months)

October 2021 – March 2022 Senior Software Integrator(extern) for HMI projects at Preh Brasov

2 projects – Daimler (Daimle_6425_HMI_SENSOR_LIN) and General Motors (GM_6346_HMI_DC_8in_Command)

- ➔ Setup the Development Environment – BSG, Debugger Workspace, DDcom, Tessy, Polyspace – Bug finder and Code Prover, Bininspector, etc.
- ➔ Update and describe the tool usage in the Description of Development Environment document.
- ➔ Create and maintain the jobs for the Jenkins Server – fast, nightly and weekly jobs with particular commands.
- ➔ Create/Update Software Integration Test Specification (+ Review together with the SW PM and SW Architect).
- ➔ Implement Scripts for the automated testing.
- ➔ Create/Update Software Integration Test Strategy.
- ➔ Create commands for the generation of different reports – DEV_SW_Testprotocol, SW_Documents_Protocol, SCM_report, etc.
- ➔ Software deliveries to our testing teams and to our customer.
- ➔ Release preparations (different integrations from mainline to branches using Surround Tool).
- ➔ Update and maintain the Release_Notes and the Release_Overview.
- ➔ Update the linker file according to the specifications received from the SW Architect.
- ➔ Participate to the review of the SW Architecture and create the relevant smoke tests (for the SW Architecture entries that are constraints for the SwIntTS).
- ➔ Update the analysis of different topics - using Test Track Tool.
- ➔ Daily interaction/discussions with the SW Developers, SW Architect and SW PM of the projects.

Employment Career – Continental Automotive Systems (7 years)

March 2021 – October 2021 Software Development Engineer, Full Software Integrator and Changer Error Manager for a Daimler (MRA2) project (AUTOSAR project)

- ➔ Developer for Belt Hand Over – responsible for bug fixing and implementation of the new requirements (new DTC to inform the user about a malfunction of the belt hand over switch, new speed in case of

some retraction/extension triggers).

- ➔ Software deliveries to our testing teams and to our customer - Daimler (at least one sprint per week).
- ➔ Integration of specific modules / features (Issues / Realization Orders, Change Packages) from mainline to dev path for 3 different variants of SW – MAX, MID2-3, MID1.
- ➔ Release preparations (configuration of the release script - update of the SW version, update of the data set version, etc.).
- ➔ Execution of the smoke tests.
- ➔ Cleaning of the release items – retarget the tasks that are not started /finished to the next sprint, create a list with all the integrated issues for our testing team, preparation of the vFlash packages, discussions with our testing team about the possible problems, etc.
- ➔ Daily interaction/discussions with our TPL, our Change Error Manager, our Scrum Master and our developers from Sibiu, Singapore and Germany (Ingolstadt).
- ➔ Jenkins maintenance.
- ➔ CANoe maintenance.
- ➔ Execution and Maintenance for our Automatic tests (daily reports).

Dec 2019 – March 2021 Software Development Engineer for a Daimler (MRA2) project (AUTOSAR project)

- ➔ Development for adjustment modules - creation of a new module in Sibiu: Belt Hand Over module (belt bringer) and also many Diagnostics implementations including the following activities: requirements review, requirements clarifications, requirements implementation in IDEAS, bug fixes, analysis for different car traces and customer/testing issues, SW Detailed Design creation using Atom Tool, Unit Tests creation/execution/automation, Software Tests with SWATT HIL, etc.
- ➔ Support / Bug Fixes / Integration for some old implementations (legacy code from MFA2 project = the base project for MRA2).
- ➔ Support/Backup for SW Integration.
- ➔ CANoe simulation generation via Model Generation Wizard tool.
- ➔ CANoe maintenance – panels creation, CAPL implementations to simulate different behaviors, support for the new Zenzefi versions and certificates, etc.
- ➔ Clarification/ execution/automation/maintenance with SWATT HIL of different software specific tests (SWIT/SWT/SyIT) for the Functional Safety Module module (FSM).
- ➔ Unit tests creation for different modules (SWATT tests) – CAN, Manual Adjustment, Diagnostic.
- ➔ Smoke tests maintenance and automation – general smoke executed for every release.
- ➔ Support and Trainer for new colleagues – SWATT, IMS, IDEAS, CANoe, Code Collaborator.

- ➔ Integrator for an old Daimler project (MFA2) – 2/3 releases per year and support for the integrator of MRA2 project.
- ➔ Analysis for different customer(car) traces.
- ➔ Jenkins owner – maintenance of different scripts and jobs (QTools reports, automatic release, SWATT report, DEV Gate – continuous integration, nightly builds, etc.).

Jul 2018 – Dec 2019 Change Error Manager for Sibiu team and SW Integrator for Daimler(MRA2 and MFA2) projects (AUTOSAR projects)

- ➔ SW integration from mainline to different development paths.
- ➔ Jenkins slave maintenance – continuous(permanent) integration with Jenkins jobs.
- ➔ Release creation – create binary files for every variant (MAX, MID2_3, MIN), QTools reports generation, SWATT Tests report generation, vFlash packs generation, checkpoints creation, execute SW Integration Tests/SW Tests/ Smoke Tests, report the results to many people involved in the project.
- ➔ Maintain SW Integration documentation.
- ➔ Support for CANoe.
- ➔ IMS Issues classification and planning for every release (handling of the tickets for the Sibiu, Germany and Singapore teams).

Jul 2017 - Jul 2018 Software Integrator for Daimler (MRA2) project (AUTOSAR project)

- ➔ SW integration from mainline to different development paths.
- ➔ Create and maintain SW integration plan and SW Integration strategy.
- ➔ Security Keys Integration – used for authentication.
- ➔ Release creation – create binary files for every variant (MAX, MID2_3, MIN), QTools reports generation, SWATT Tests report generation, vFlash packs generation, checkpoint creation.
- ➔ Create \ Execute Smoke Tests for every release (also create automation when possible).
- ➔ Create \ Execute Integration Tests for every release (also create automation when possible).
- ➔ Create \ Execute Software Tests for every release (also create automation when possible).
- ➔ Flash Bootloader (FBL) Integration and EOL Integration.
- ➔ Diagnostics implementations: mainly DTCs and DIDs.
- ➔ CANoe simulation generation via Model Generation Wizard tool.
- ➔ CANoe maintenance – panels creation, CAPL implementations to simulate different behaviors, Candela integration, etc.

Jun 2016 - Jul 2017 Software Developer for Ford C2 project (AUTOSAR project)

- ➔ Run Time Environment (RTE) – interfaces creation using Rhapsody and generation of the code using RTools.
- ➔ Help for SW architects and developers – daily discussions and clarifications about the interfaces to be created.
- ➔ CANoe simulation generation via Model Generation Wizard tool.
- ➔ CANoe maintenance – panels creation, CAPL implementations to simulate different behaviors, Candela integration.
- ➔ Diagnostic implementation for Diagnostic Trouble Codes (DTCs) and Diagnostic Identifier Data (DIDs).

Jun 2014 - Jul 2016 Intern, Junior engineer, System Test team (student, part time – 4h per day)

- ➔ Testing BCMs - Body Control Modules for Porsche and Audi projects) – assigned modules: trunk lights and Controller Area Network (CAN).
- ➔ Requirements clarification and manual tests using CANoe.

Methodologies

- Software engineering
- AUTOSAR (knowledge about COM, DIAG, RTE)
- V-Model Methodology
- Agile Scrum Methodology (involved in the full life cycle of the project, attended daily scrum meetings, sprint planning meetings and sprint review meetings)
- ASPICE key user (SWE.4 Software Unit Verification, SWE.5 Software Integration and Integration Test, SWE.6 Software Qualification Test, SUP.10 Change Request Management)

Programming Languages

- Embedded C
- C
- CAPL
- SWATT HIL
- C++ (basic)
- Python
- MATLAB (basic)
- JavaScript (basic)

Development and Testing Tools

- Eclipse (IDEAS)
- Microsoft Visual Studio
- CANoe
- DOORS
- Rhapsody
- IMS, MKS
- EB tresos Studio (Elektrobit, used for BSW configurations)
- Jira
- winIDEA

- Jenkins
- Surround
- Test Track
- Tessy
- Polyspace Bug Finder and Code Prover
- Binspector
- IAR Embedded Workbench
- Trace
- CodeCollaborator
- MATLAB Simulink
- TPT (Time Partition Testing)
- Toolcenter (internal automation tool used in ProIT)
- Enterprise Architect
- In-Step
- GIT
- J-link
- Vflash
- Vector CAST
- Turtoise SVN
- Enterprise Architect
- Ozone
- Postman
- Postman CLI
- Newman
- Continuous Integration and Continuous Delivery (CI/CD)
- Cypress
- Behavior-Driven Development (BDD)
- Chai
- Mocha
- Cucumber
- Selenium Webdriver
- Pytest

Testing skills

- Fundamentals of testing
- Testing throughout the software development lifecycle
- Static Testing
- Test Management
- Tool support for testing
- The Test Analyst's tasks in the test process
- The Test Analyst's tasks in risk based testing
- Test techniques
- Testing software quality characteristics
- Reviews
- Tools and automation

Other Skills

- Team working skills

- Communication skills
- Organizational skills
- Patience
- Positive attitude
- Time management
- Precise on working schedules
- Curiosity to keep learning
- Creativity to bring fresh ideas to the table
- Proactive

Languages

- Romanian - native
- English - advanced (listening, speaking, reading, and writing)

Trainings and certifications

- Problem solving and Decision Making (Know, March 2019)
- Agile Methodology (Colors in projects, 25-28 Aug 2020)
- AUTOSAR Training (Continental, 19-28 April 2021)
- Virtual Ownership Workshop (Continental, 8-9 July 2021)
- Training safety critical embedded system (Method Park, 16 -18 Aug 2021)
- ISQTB Foundation Level – ID: 22-CTFL-209668-14 (ISTQB® - International Software Testing Qualifications Board, June 2022)
- Postman: The Complete Guide - REST API Testing – ID: UC-7d8e821f-8214-4b34-b05d-9fbdbc9d72f9 (Udemy, October 2024, https://udemy-certificate.s3.amazonaws.com/pdf/UC-7d8e821f-8214-4b34-b05d-9fbdbc9d72f9.pdf)
- ISTQB® Certified Tester - Advanced Level - Test Analyst – ID: 24-CTAL-TA-254430-12 (ISTQB® - International Software Testing Qualifications Board, November 2024)
- Cypress -Modern Automation Testing from Scratch + Frameworks – ID: UC-ffe12691-c8f9-40cf-84c4-c2bc52652103 (Udemy, November 2024, https://www.udemy.com/certificate/UC-ffe12691-c8f9-40cf-84c4-c2bc52652103/)
- Selenium Webdriver with PYTHON from Scratch + Frameworks – ID : UC-a60c45eb-d637-4bc1-83b5-cb5552ccbc4d (Udemy, January 2025, https://www.udemy.com/certificate/UC-a60c45eb-d637-4bc1-83b5-cb5552ccbc4d/)