# MEGHANA Software Engineer

## CONTACT

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**Location**: Stuttgart, Germany

**Languages:** English (Fluent – C2), Deutsch (Beginner – B1)

**Availability -** Immediately

## TECHNICAL SKILLS

**Programming languages:**

- C/C++: Intermediate
- Python : Basic
- MATLAB : Basic
- VHDL : Basic

**Tools**, **Frameworks and Platforms:**

- Vector CANoe
- STM32 DS for ARM
- Enterprise Architect
- Microsoft Visual Studio
- Lauterbach TRACE32 Vector
- SEGGER J-Link/ J-Trace
- Ozone(x64)
- Lipowsky LINWorks
- LDRA Testbed
- Confluence
- Bitbucket
- UDS via CAN
- I2C, SPI, LIN
- vFlash
- ODX
- Raspberry-Pi
- Arduino
- Xilinx-ISE

## SUMMARY

Seeking a Software Engineer role to apply my skills, embrace new technologies, and contribute to impactful, innovative projects.

- **5 years** of experience, and optimizing embedded systems.
- **Designing, developing, debugging and troubleshooting**.
- **End-to-end software development**, following **ASPICE** and **AUTOSAR** standards.
- Proficient in **RTOS, device drivers, and communication protocols.**
- A **collaborative team player** delivering **reliable and high-quality software solutions**.

## PROFESSIONAL EXPERIENCE

**Embedded Software Engineer**                                    May 2022 – Dec. 2023
**Da Vinci Engineering GmbH**(**Stuttgart, Germany**)
*Project:* "Embedded software development for automotive tail lights at Odelo GmbH" –

- **Designed, developed and tested** software by achieving a **13% reduction in development time** and **100% on-time delivery** through collaboration with hardware and system engineers.
- Ensured adherence to **ISO 26262** standards, **improving software reliability by 30%** and enhancing safety and regulatory compliance.
- Managed requirements, coordinated **agile sprints** and implemented version control to enhance teamwork, transparency, and efficiency.
- Optimized **UDS over CAN** protocols to improve diagnostic accuracy by 40%, while proactively addressing 45% of project risks, reducing post-release defects by 15% and ensuring a stable product.

**Work Student**                                                            Oct. 2021 to Dec. 2021
**Siemens Energy Power Control GmbH**(**Langen, Germany**)
*Project:* "Identification of Dynamic Process Behaviour" –

- Analyze the acceptable lower limits of the test signals in simulated processes and with the always present noise.

**Student Intern and work student**                          Dec. 2019 to Nov. 2020
**Robert Bosch GmbH (Leonberg, Germany)**
*Project:* "Athena video sensor for automobiles" –

- Software Unit and module testing and Software quality management.

**Senior Software Engineer**                                        Oct. 2014 to Aug. 2017
**Robert Bosch Engineering and Business Solutions Private Limited (Bengaluru, India)**
*Project:* "Mono Multi-Purpose Camera and Stereo Vision Camera for Automobiles"

- **Designed** a precise **lens sensor calibration module** in an **AUTOSAR** environment in RTOS automotive applications, adhering to ASPICE and ISO 26262 standards.
- Resolved 40+ software defects, **leading root cause analyses** and achieving a 15% reduction in system issues.

- MATLAB-Simulink
- GENy, Flux, GTest
- ChronSIM, SIL with ADTF
- Microsoft Office
- Picoscope, Oscilloscope

**Software development methodologies:**
- Agile
- Scrum

# CORE COMPETENCIES

- Leadership and Team management skills
- Risk Management
- Mentorship and Team Development
- Stakeholder Communication
- Model-based development.

- **Managed timelines and deliverables**, facilitating stakeholder meetings, addressing client feedback, and ensuring on-time milestones.
- Documented processes to streamline onboarding, reducing developer ramp-up time by 20%, while **mentoring junior engineers and fostering team growth**.

# EDUCATION

**Bachelor of Engineering in Electronics and Communication**

SJB Institute of Technology under Visvesvaraya Technological University – 2014 (**Bengaluru, India**)

# PROJECTS

- "Detection and Analysis of Radar Signals", 2014.
- "DRT Real-Time (Embedded) Analyzer using STM32 Controller", 2019.
- "Design and simulation of an Analog to Digital Converter in VHDL/VHDL-AMS using AD7922 controller", 2019.
- "Histogram, Segmentation, Morphology, Thresholding, Filtering and Edge detection using Raspberry Pi", 2019.

# SEMINARS

- Hardware Acceleration- Image Processing – 2017
- Night Vision System in Automobiles – 2018
- Serial Peripheral Interface – 2018
- Contributions from Evolutionary Perspective – 2018