**JAHNAVI YERRAMELLI**  
Bangalore, Karnataka  
Mobile: 8247882013/8125752013  
yerramellijahnavi@gmail.com  
LinkedIn-

**Professional Summary**

Results-driven Software Engineer with 3 years of experience at Continental Autonomous Mobility. Expertise in C++ for sensor fusion techniques involving static objects, as well as extensive knowledge of the Classic AUTOSAR DCM, DEM modules using Embedded C. Proficient in Python automation for improving development processes and enhancing system efficiency. Committed to delivering high-quality software solutions in the automotive industry.

**Technical Skills**

* **Programming Languages:** C++, Embedded C, Python
* **AI & Machine Learning:** Neural networks.
* **Software Development:** Sensor Fusion, Embedded Systems, AUTOSAR DCM, DEM
* **Tools & Technologies:** Git, Visual Studio, PyCharm, JIRA, Davinci, Canoe, Lauter Bach, IBM Doors, Cmake, Plantuml, Yolo for object detection with CV.
* **Methodologies:** Agile, Scrum, Test-Driven Development (TDD), ASPICE, Structured problem solving

**Professional Experience**

**Continental Autonomous Mobility**  
*Software Engineer*  
[Bangalore, Karnataka] | [October 2021] – Present

* Developed and implemented sensor fusion algorithms in C++ to accurately detect and analyze static objects, enhancing autonomous vehicle capabilities.
* Contributed to the design and development of the Classic AUTOSAR Diagnostic Communication Manager(DCM), Diagnostic Event Manager (DEM) module using Embedded C, ensuring compliance with automotive standards, and enhancing system diagnostics.
* Automated testing and deployment processes using Python, significantly reducing manual intervention, and improving efficiency in software delivery.
* Collaborated with cross-functional teams to integrate software components, troubleshoot issues, and ensure seamless operation of autonomous systems.
* Participated in code reviews and contributed to improving coding standards and practices within the team.

**Education**

**BTech** in Electrical and Electronic Engineering  
Amrita University Kollam, Kerela  
Graduated: June 2021

**Awards**

* **Spot Award for my contributions in ADCU DCM [0x19-DEM]**

Received a recognition on my attitude of ready to learn and taking up new challenges while contributing in ADCU DCM-0 x19 service.

– Continental Autonomous Mobility - July 2024

* **Spot Award for Innovation activities and teamwork**

Received an award on my collaboration with team in filing new ideas.

– Continental Autonomous Mobility - Oct 2023

* **Spot Award for Improving the SEF performance.**

Received a recognition award on my work in improving the SEF performance.

– Continental Autonomous Mobility – Nov 2022

**Certifications**

* Certified C++ programmer
* AI/ML certification
* Embedded C certified programmer

**Projects**

* **CEM- SEF developer:** Developed a robust C++ application for sensor fusion and optimized various implementation that improved the accuracy of static object detection in varying environmental conditions.

**TPF, RMF Modules -**Played a support role in improving RMF and TPF performance in lane and line detections and traffic participant fusion in varying environmental conditions.

* **AUTOSAR- ADCU DCM [0x19-DEM] developer:** Designed and streamlined the testing and validation of the AUTOSAR DEM module, ensuring compliance with industry standards.
* **EM-** **Automation Tester using python scripting:** Developed the python scripts to identify different issues in the output objects which reduces the manual analysis efforts.

**Professional Affiliations**

* Member, [Relevant Professional Organization, e.g., IEEE, SAE International]

**References**

Available upon request.

C++:

Mandatory:

Intermediate topics:

* Templates
* Type casting.
* Static variables
* Overriding and overloading [function and operator]

Complex topics:

* Data structures [linear DS: static DS-> Array, Dynamic DS-> Queue, Stack, Linked Lists || Non-linear DS: Tree, graph]  
  Containers[Array, lists, vector, set, map, stack, queue, string, heap, matrix]
* OOPS: [classes, objects, constructors, inheritance, polymorphism, encapsulation, abstraction, virtual class/method, default class]
* Pointers
* Static and dynamic memory allocation

Optional:

Complex topics:

* Multithreading
* Lambda expression
* Libraries [OpenCV]

Intermediate topics:

* Basics on IDE, build systems[Cmake], compilers[GCC, Mingw], package managers[Conan].
* Basic operators [arithmetic, bitwise, logical, loops]
* Frameworks [gtests]
* Datatypes [Auto keyword]