

CURRICULUM VITAE

NITINSHAN FREDRICK WILLIAM AMALRAJ

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EXPERIENCE

BOSCH GLOBAL SOFTWARE TECHNOLOGIES

JAN 2023 – SEP 2025

SOFTWARE ENGINEER

Coimbatore, India

- Developed, integrated, and tested hardware-related software for Integrated Power Brake (IPB) module.
- Debugged and identified software bugs using Lauterbach and debugger .
- Provided effective customer support by addressing inquiries, resolving problems, and ensuring timely delivery.
- Tools were created and automated using Python libraries like Pandas, NumPy, and PyQt to handle massive datasets, analyze logs, and provide a user-friendly interface. This reduced analysis time by 90%.
- Ranked top-3 out of 200 freshers in a 4-month intensive training program in C, C++, embedded systems, MISRA C and Communication protocols (CAN, SPI, I2C, UART) through consistent performance in weekly tests and assignments. Recognized with a cash reward from the Bosch-India Vice President.

RENAULT NISSAN TECHNOLOGY AND BUSINESS CENTER INDIA

MAY 2022 – NOV 2022

SOFTWARE AUTOMATION INTERN

Chennai, India

- Utilized Python for automating tasks within the Ansa and Meta CAE applications, using Object-Oriented Programming (OOPS) and with libraries such as Numpy, SciPy, and Pandas.
- The project streamlined employee workflows, reduced the potential for human errors, and ultimately led to an impressive 95% decrease in the overall process time.

ASHOK LEYLAND

SEP 2021 – MAR 2022

DATA ANALYST & FIELD QUALITY INTERN

Chennai, India

- Analyzed data to identify the root causes of air leaks in Ashok Leyland trucks.
- Collected and reviewed customer warranty claims on pneumatic brake issues by collaborating with dealers and examining customer feedback.
- Identified failure patterns, investigated underlying causes, and proposed targeted solutions to reduce air leaks and improve brake system reliability.

EDUCATION

Universität Stuttgart - M.S.

OCT 2025 - PRESENT

Master Program in Information Technology

Stuttgart, Germany

SRM Institute of Science and Technology - B.Tech.

JUN 2018 – MAY 2022

Automobile Engineering with Specialization in Automotive Electronics - CGPA - 9.07

Chennai, India

Maharishi Vidya Mandir

JUN 2016 – MAY 2018

Class 12 - Percentage - 86.4%

Chengalpattu, India

Maharishi Vidya Mandir

JUN 2014 – MAY 2016

Class 10 - CGPA - 10

Chengalpattu, India

POSITION OF RESPONSIBILITY

CAMBER RACING , SRM University
Manufacturing & Chassis Lead

SEP 2019 – MAY 2022
Chennai, India

- As Manufacturing Lead, spearheaded manufacturing strategies and manufactured and fabricated components for the Formula Student Car.
- As a Chassis Lead, fabricated lightweight robust chassis systems by considering aspects of longitudinal, lateral and vertical dynamics of the race car .Additionally designed and programmed electronic systems for sensing of steering angle, suspensions travel and wheel speed.

TECHNICAL SKILLS

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|---------------------|----------------------|-----------------------|-----------------|
| • Python | • Data Analysis | • Data structures and | • NumPy & SciPy |
| • C & C++ | • Sensor & Actuators | Algorithms | • Mathlab |
| • CAN Communication | • OOPS | • Vehicle Dynamics | |

SOFT SKILLS

- | | | |
|-------------------|-------------------|---------------|
| • Problem Solving | • Time Management | Communication |
| • Communication | • Customer | |

ACHIEVEMENTS

Formula Bharat(2022)-Runner up

JAN 2022

- Achieved Runner-Up at Formula Bharat 2022, showcasing expertise in vehicle engineering and effective teamwork, contributing to the team's success in this highly competitive event.

Performance Scholarship

MAY 2021

- Secured a Performance Scholarship at SRM University in recognition of outstanding academic performance in academic year 2020-2021.

LANGUAGES

- English - Expert
- German -Beginner
- Tamil - Native
- Hindi - Intermediate

CERTIFICATIONS

- The Complete Self-Driving Car Course - Applied Deep Learning- Udemy
- Getting Started with AWS Machine Learning - AWS - Coursera
- Sensors and Sensor Circuit Design - University of Colorado- Coursera
- Programming Foundations with JavaScript, HTML and CSS - Duke University - Coursera

VOLUNTEERING

Corporate Social Responsibility , Bosch

JAN 2023 - SEP 2025

- Engaged in Corporate Social Responsibility(CSR) initiatives, which include painting public schools, organizing nature conservation campaigns, promoting education and creating environmental awareness for sustainability. Recognized with a Certificate of Appreciation for contributions to community welfare.

Evolve, Bosch

JAN 2023 - SEP 2025

- Collaborated with HR to organize events within Bosch and support the onboarding of freshers. Actively participated in various self-development and personal growth workshops.

National Service Scheme,SRM University |

JUN 2018 - APR 2019

- Enthusiastically participated in cleanliness campaigns to promote community well-being. Organized and led an awareness event at a public school to support underprivileged children.