



Jayakrishnan P S

Nationality: Indian **Date of birth:** 6 Sep 2001 **Phone number:** (+91) 9207072030

Email address: jayakrishnan6901@gmail.com

WhatsApp Messenger: 9207072030

LinkedIn: <https://www.linkedin.com/in/jayakrishnan-ps-949502190/>

Home: Vishakham, Nadakkal Aduthala(p.o), 691579 kollam (India)

ABOUT ME

A highly motivated and driven engineering student with a strong passion for advancing knowledge in industrial production and the automotive industry. With hands-on experience in software development, including expertise in Angular, Vue.js, and .NET MAUI, as well as familiarity with WinCC OA and SQLite for industrial applications, I am focused on seeking opportunities to grow as an engineer. I thrive in problem-solving environments and am eager to further develop both technical and software skills, while contributing to innovative projects and solutions within the industry.

EDUCATION AND TRAINING

Production Engineering (B Tech)

National Institute of Technology Calicut [29 Jul 2019 – 15 May 2023]

City: Kozhikode | **Country:** India | **Website:** <https://nitc.ac.in/> | **Field(s) of study:** Engineering, manufacturing and construction | **Final grade:** 8.88 CGPA

Link: <https://drive.google.com/file/d/1SpzPxLwINAABPxpcrHMrqCunbgk-eA5d/view?usp=sharing>

- Problem analysis: Recognize, formulate, investigate, and evaluate intricate engineering problems, arriving at supported findings by applying the fundamentals of mathematics, the natural sciences, and
- Engineering sciences. Effective use of resources to boost production system performance; design of goods and processes to guarantee quality and dependability; and application of innovative materials, manufacturing techniques, and automation technologies in production systems.

XII-XI (Higher Secondary Education)

Placid Vidya Vihar [19 Apr 2017 – 31 Mar 2019]

City: Changanassery | **Country:** India | **Website:** <https://placidschool.com/> | **Field(s) of study:** PCMC | **Final grade:** 94.2%

Link: <https://drive.google.com/file/d/10da0rcwLUgRGelzE9jswoUUC-NVVLohZ/view?usp=sharing>

X (Secondary Education)

Vimala Central School [1 May 2016 – 31 Mar 2017]

City: Kollam | **Country:** India | **Website:** <https://vimalacentralschool.com/> | **Final grade:** 100%

Link: https://drive.google.com/file/d/1vfefe5PaKH_t5k6JLCoW4FR14l4eQTt/view?usp=sharing

WORK EXPERIENCE

Intern - Technical

SIEMENS TECHNOLOGY AND SERVICE PRIVATE LIMITED [3 May 2022 – 20 Jul 2022]

City: Bengaluru | Country: India

- **SCADA Systems and PLC Programming:** Gained proficiency in SCADA systems like WinCC V8 and implemented automation projects such as a Sewage Treatment Plant with WebUI integration. Acquired in-depth knowledge on various SCADA softwares.

Software developer

SIEMENS TECHNOLOGY AND SERVICE PRIVATE LIMITED [3 Jul 2023 – Current]

City: Bengaluru | Country: India

- **Front-End Development:** Designed and developed intuitive user interfaces using Angular, Lit, and Vue.js frameworks to enhance user experience.
- **Back-End Development:** Developed and integrated server-side logic using Node.js for efficient data processing and seamless communication with front-end applications.
- **Framework Expertise:** Migrated codebases from Angular to Lit framework, ensuring optimized performance and compatibility.
- **Web Dashboard Development:** Researched and developed Storybook for component-driven development and created reusable widgets for web dashboards.
- **Simaris Select Project:** Developed a comprehensive web application to generate Bill of Materials (BOM) and circuit details based on user requirements, utilizing Vue.js for the front-end and Node.js for the back-end.
- **Technical Research and Validation:** Conducted extensive research on element internals for validation mechanisms and their applications in modern web development.
- **Collaboration and Integration:** Worked collaboratively in cross-functional teams, ensuring seamless integration of software components and delivering high-quality, scalable solutions.

PROJECTS

Design and development of variable damping torsional dampers for small diesel engines using MR Fluids.

Vibrations are periodic or random oscillations that occur about an equilibrium point. Vibrations occur as an undesirable effect in many engineering applications, like heavy machinery and tall structures. Many methods have been formulated to control and minimize the effects of vibration, including dampers, vibration absorbers, isolators, etc. A passive vibration absorber suppresses vibrations from a source when it is tuned to the right frequency. However, if the exciting frequency varies, the vibration of the entire system may increase significantly. Thus, an important and desirable characteristic of vibration control devices is their ability to be tuned to a wide range of frequencies. So me and my team decided to create a damper that can be operated at a wide range of frequencies.

We focused on the control of torsional vibrations induced in the crankshaft of engines due to the firing of cylinders with the help of smart materials, specifically magneto-rheological fluid, to achieve variable stiffness and damping properties. It consists of micron-sized, magnetically polarizable particles dispersed in a carrier medium such as mineral oil or silicone oil where the crankshaft is situated and the carrier or shell surrounding the crankshaft is coincided with varying-current carrying coil wounds around the shell. On application of a spectrum of current, varying stiffness or damping is created by the MR fluid. Thus, a semi-active vibration absorber that can absorb vibrations over a large range of frequencies with low power consumption and low response time can be developed. This also aims at increasing engine life with maximum vibration reduction as primary aim, accompanied with increased fuel efficiency and better riding comfort due to the reduction of torsional vibrations caused by the engine firing

CONFERENCES AND SEMINARS

Reduction of Vibrations using Variable Damping Torsional Dampers for Smart Vehicles using real-time intelligence Smart Fluid Controls.

The project led by me and my team, recognized as an innovative project by the Project Judging Panel of our college, gave us the opportunity to present our work at the 4th International Conference on Advanced Engineering Optimization through Intelligent Techniques (AEOTIT), hosted by the Department of Mechanical Engineering at Sardar Vallabhai National Institute of Technology (SVNIT) on September 20, 2023,

Link: https://drive.google.com/file/d/1t7zk2kQ6Y_o-3ILMA6JbVA9Q8XD5m-j/view?usp=sharing

LANGUAGE SKILLS

Mother tongue(s): Malayalam

Other language(s):

English

LISTENING C1 READING C1 WRITING C1
SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Hindi

LISTENING B2 READING B2 WRITING B1
SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

German

LISTENING A2 READING A2 WRITING A2
SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

HONOURS AND AWARDS

[Jun 2024] Siemens Technology and Service PVT LTD.

IP Samman certificate

Received IP Samman certificate under the category Rising Inventor from Siemens Technology and Service PVT LTD.

Link: <https://drive.google.com/file/d/1b0uCjrMmfQeW-mLZil9Lcu7KsD2SdGu4/view?usp=sharing>

[Oct 2024] Siemens Technology and Service PVT LTD.

Got an idea archived for Siemens

Link: <https://drive.google.com/file/d/17l4gEcpxc0NNeb0lvGhFIJmH4TmLIG/view?usp=sharing>

Shape AI

Contribution for Shape AI Community

Link: <https://drive.google.com/file/d/1liga8s-hyTUnr0OepJIVsuRxksAstzi7/view?usp=sharing>



MANAGEMENT AND LEADERSHIP SKILLS

JC Comittee - Head Coordinator

Being a Judging Committee Head Cordinator during my college Cultural Fest Ragam enhanced my interactivity into various responsibilities such as probing and contacting new judges for various events, setting up transportation, a point of contact and accommodation for them , accompanied by a great hospitability from our side despite unforeseen circumstances, proving that I have Strategic way of solving problems under pressure and also consisting ample Leadership and managerial skills with Interactive communication

DIGITAL SKILLS

Digital Skills - Test Results

	Information and data literacy	ADVANCED	Level 6 / 6
	Communication and collaboration	ADVANCED	Level 6 / 6
	Digital content creation	ADVANCED	Level 6 / 6
	Safety	ADVANCED	Level 6 / 6
	Problem solving	ADVANCED	Level 6 / 6

Results from [self-assessment](#) based on [The Digital Competence Framework 2.1](#)

My Digital Skills

Python Language - Basic knowledge / C, C++ C# / Git / Vuetify - Material UI (Junior) / Microsoft Office / JSON / React.js / Vue.js / Conhecimento em Angular, Javascript, CSS, HTML / Javascript / Typescript / Node / Express / Autocad and Solidworks / Creo PARAMETRIC / On-Shape / Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access / wincc professional SCADA / SCADA Programming (WinCC, TIA Portal) / lit-element / CNC coding

CERTIFICATIONS

Automechanics Motorsport Engineering

Link: <https://drive.google.com/file/d/1uzACUCdaVIP5kSul4mFYlsJA3jO5lbU9/view?usp=sharing>

Python Programming

Link: <https://drive.google.com/file/d/1TN21Z1DXDIrs7rV0cGqs3h9l2sOAZy1k/view?usp=sharing>

NodeJS

Links: <https://drive.google.com/file/d/1gMvTbiAQcHSdzbyzBdmJtGd3uxGz4ct4/view?usp=sharing> | <https://drive.google.com/file/d/1BxRve9-CEOh5AaAI5EYo7qxXvkgdw19/view?usp=sharing>

VueJS

Links: https://drive.google.com/file/d/1AMD-pkmuEf3tNp17NXI_V8bvjY0C8NLa/view?usp=sharing | <https://drive.google.com/file/d/1KfznpQ-c97TJCbvk2HM8S9W9taCUc30B/view?usp=sharing>

Javascript and Typescript

Links: https://drive.google.com/file/d/1BvWMZKFHrd532M3zE_YUAg3w1iTEej75/view?usp=sharing | https://drive.google.com/file/d/1MtslYq7b_FmGl7u0RnasVthZHbh53Ypo/view?usp=sharing

React

Links: <https://drive.google.com/file/d/16fogVc5yn3keP6kctred39AGVJpVzVDH/view?usp=sharing> | <https://drive.google.com/file/d/1XL8lkKudvyvZuss6jLmZcyMKgKntZcOY/view?usp=sharing> | https://drive.google.com/file/d/1-e3guU_rZpflGnVTM814SsaTcJgREqHB/view?usp=sharing

HOBBIES AND INTERESTS

Interested in: Industrial And Production Management, Automotive Production And Designing, Coding, Mechatronics And Computational Automation, Web Development, Software Development.

Hobbies : Music, Anime, Coding, Driving

In conclusion, my love of mechatronics and cyber-physical systems, along with my education, real-world experience, and software development skills, put me in a strong position to advance engineering solutions in the automobile industry. My abilities complement Germany's inventive environment, and I kindly ask for your assistance in granting me a visa so that I may take advantage of this chance and make a significant contribution to the industry. Thank you for your consideration.

Kollam India