

6st August, 2024.

To Whom It May Concern,

I am delighted to write this letter of recommendation for Fayyaz Shaikh, who has been an outstanding Embedded Systems Developer and Workshop Trainer during his 6-month internship at Smowcode Pvt Ltd. Fayyaz has demonstrated exceptional skills, dedication, and a proactive approach that has significantly contributed to our projects and training programs.

During his internship, Fayyaz undertook a wide range of projects using Smowcode, showcasing his versatility and technical knowledge. Some of his notable projects include creating a Calculator, Sunrise alarm, Bluetooth door lock, Motion sensor, etc. Additionally, he has worked on Wokwi simulator with Smowcode, enabling hardware-free simulations. Fayyaz also developed libraries and comprehensive documentation for Smowcode. His tutorial videos on the efficient use of Smowcode and debugging techniques have been invaluable resources for our users. Moreover, Fayyaz contributed to the development of datasets for Smowcode, which are used to train large language models, further highlighting his analytical and data management skills.

One of Fayyaz's significant accomplishments was updating the C libraries in Smowcode for ESP-IDF. This task required meticulous attention to detail and a deep understanding of embedded systems. He also created a PID (Proportional-Integral-Derivative) control library for the ESP32, integrating DAC and analog read codes to control LED brightness with an LDR, demonstrating his ability to bring theoretical concepts into practical applications.

Fayyaz has shown an excellent grasp of communication protocols. He has learned and implemented I2C in master mode, creating its library using Smowcode's coding, studied SPI master mode and mastered bitbanging techniques to manipulate GPIOs for ESP32. He also explored UART for NXP's S32K144, He has also worked on creating datasets of Smowcode for training LLM models.

In addition to his technical skills, Fayyaz has been an exceptional workshop trainer. He has conducted numerous workshops, expos, and webinars, teaching students how to code using Smowcode. Despite being a diploma student, Fayyaz has effectively taught degree students, showcasing his ability to communicate complex concepts clearly. He organized the Smowcode hackathon at Sardar Patel Institute of Technology, Andheri for the EXTC department and conducted a 2-day workshop event at Arvind Gavli College of Engineering in Satara. His seminars and workshops at esteemed institutions such as Thakur College of Engineering Kandivli, Vidyalankar Institute of Technology Wadala, KJ Somaiya Institute of Technology Sion, Lokmanya Tilak College of Engineering Koparkhairane, and at his own college Government Polytechnic Mumbai, and others have been highly successful. And he also has conducted expo events at VJTI Matunga, Jai Hind College Churchgate, and College of Engineering Pune.

Fayyaz Shaikh is a highly skilled, dedicated, and resourceful individual whose contributions have been invaluable to Smowcode Pvt Ltd. I am confident that he will excel in any future endeavours and bring the same level of expertise, enthusiasm, and commitment to any organization he joins.

I wholeheartedly recommend Fayyaz for any opportunity that aligns with his skills and interests.

A handwritten signature in black ink, appearing to read '@adhik'.

Mr Adhik Mewada

Managing Director,

Smowcode Private Limited, Mumbai.

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