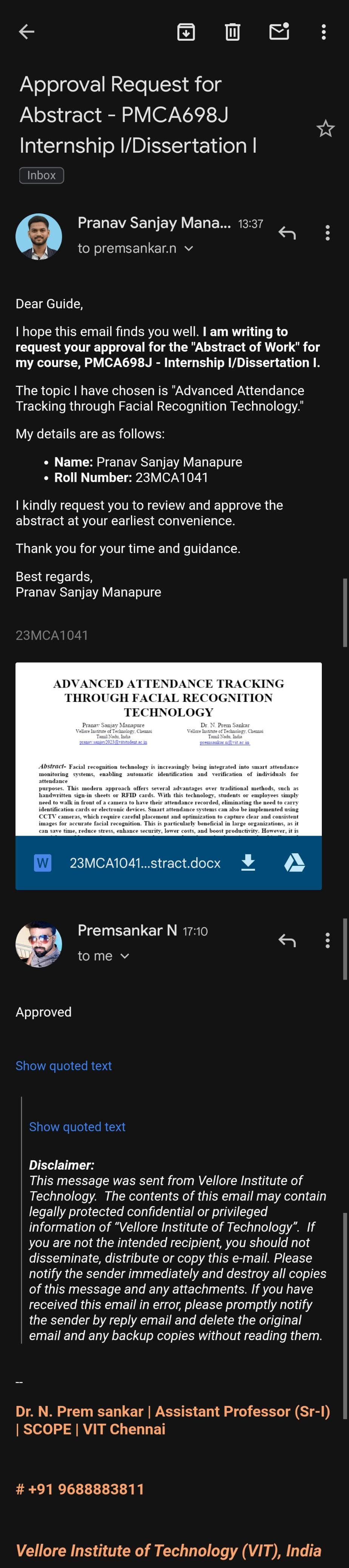
**Guide’s Approval-**



**ADVANCED ATTENDANCE TRACKING THROUGH FACIAL RECOGNITION TECHNOLOGY**

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***Abstract-* Facial recognition technology is increasingly being integrated into smart attendance monitoring systems, enabling automatic identification and verification of individuals for attendance**

**purposes. This modern approach offers several advantages over traditional methods, such as handwritten sign-in sheets or RFID cards. With this technology, students or employees simply need to walk in front of a camera to have their attendance recorded, eliminating the need to carry identification cards or electronic devices. Smart attendance systems can also be implemented using CCTV cameras, which require careful placement and optimization to capture clear and consistent images for accurate facial recognition. This is particularly beneficial in large organizations, as it can save time, reduce stress, enhance security, lower costs, and boost productivity. However, it is crucial to address privacy concerns and ensure that the technology is used ethically and responsibly. Facial recognition can identify individuals even in challenging conditions, such as low light or crowded areas. While these systems offer numerous benefits over traditional methods, it is important to implement them thoughtfully and accurately.**

***Keywords-*** *Local Binary Pattern (LBP), Convolutional Neural Networks (CNN), Generative adversarial network (GAN), Support Vector Machine (SVM), Face recognition (FR), Machine Learning (ML), Deep Learning (DL), Local Binary Pattern Histogram (LBPH), Principal Component Analysis (PCA) and Linear Discriminant Analysis (LDA).*