

I-STEM Software Request - Guide Approval Form

User Details

- Name of Researcher: RAHUL N U
- User Type: ☒ Ph.D. Scholar ☐ Postdoctoral Researcher ☐ Bachelor's ☐ Masters
- Institution Name : IIT Palakkad
- Institutional Contact No: +91 - 9847464794
- Research Topic: *Experimental investigation on chatter in turning*

Software Request Details

- Software Name: Lab VIEW
- Justification for Software Request: The primary objective of my research is to develop a machine learning model for chatter prediction and stability analysis in turning operations, particularly involving hard-to-machine materials like Inconel. This requires precise acquisition and analysis of real-time vibration signals and cutting forces during machining. LabVIEW provides seamless integration with National Instruments (NI) Data Acquisition (DAQ) hardware, which is essential for capturing high-frequency acceleration and force signals during turning operations. The synchronized acquisition ensures accurate time-domain data necessary for reliable chatter identification.

- Guide/Supervisor Approval

I, Dr. D. CHAKRADHAR

(Guide/Supervisor Name),

- Confirm that the above-mentioned researcher is affiliated with our institution
- Have reviewed the software request and its relevance to the researcher's academic work
- Approve the software request for research purposes

Approval Confirmation

- I approve the software request
- The software aligns with the researcher's research objectives
- The request meets the institutional research guidelines

Guide/Supervisor Signature: Dr. D. Chakradhar

Date: 06/06/2025

Dr. D. Chakradhar
Associate Professor
Dept of Mechanical Engg
IIT Palakkad

Official Stamp/Seal: [Space for Institutional Stamp]

Important Notes

1. This form must be signed and scanned
2. The scanned copy must be uploaded with the software request
3. Electronic signatures are acceptable if from an official institutional email

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