# CHANDIGARH UNIVERSITY

## DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

# **PROJECTPROPOSAL**

1. Project Title: - Finger Vein Recognition System using Maximum curvature Points

## 2. Project Scope: -

In our project, we are developing a sophisticated software interface that harnesses the potential of finger vein recognition for robust biometric authentication. By implementing the innovative Maximum Curvature Point method, we aim to extract intricate vein patterns from individuals, ensuring an unprecedented level of security. Our focus lies in refining the core mathematical framework of this technique, thereby enhancing its accuracy and efficacy. This approach empowers us to delve into the realm of intricate vascular patterns, impervious to replication. As we manipulate the intrinsic variables within the Maximum Curvature Point algorithm, we anticipate achieving heightened distinction in vein-pattern extraction.

## 3. Requirements: -

### > Hardware Requirements

- 1. Working Windows system with ram > 8gb
- 2. Java Complier
- 3. Camera or any scanner to scan finger veins

## > Software Requirements

- 1. MATLAB
- 2. Dev Environment
- 3. Python

#### STUDENTS DETAILS

| Name            | UID       | Signature |
|-----------------|-----------|-----------|
| Abhishek Mishra | 20BCS3642 |           |
| Tolesh Pathak   | 20BCS3521 |           |
| Abhay Tomer     | 20BCS3566 |           |

#### APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

| Name | Title | Signature<br>(With Date) |
|------|-------|--------------------------|
|      |       |                          |