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LibreCAD line selection



Keith Sloan

Free

Upgrade



3. geomutils.py — geometry helper functions

This file contains the shared geometry operations.

python

Copy code

```
import FreeCAD, Part
import math

EPS_COINCIDENT = 1e-3
EPS_COLLINEAR = 1e-4

def is_collinear(l1, l2, tol=EPS_COLLINEAR):
    d1 = l1.EndPoint - l1.StartPoint
    d2 = l2.EndPoint - l2.StartPoint
    if d1.Length == 0 or d2.Length == 0:
        return False
    return abs(d1.normalize().dot(d2.normalize())) > (1.0 - tol)

def merge_connected_lines(lines):
    used = set()
    chains = []

    for i, ln in enumerate(lines):
        if i in used:
            continue

        chain = [ln]
        used.add(i)
        extended = True

        while extended:
```

