# **Constrained RDP Algorithm**

Constrained simplification of arbitrary polylines in the context of arbitrary planar geometries.

## How to use

Open a terminal (command line) from the directory containing constdp[.exe]. Simplification options are made available through the use of TOML file (config.toml). Execute constdp with the following command:

```
./constdp -c ./config.toml
```

If a -c option is not provided at the terminal e.g. ./constdp , it assumes -c ./config.toml as default.

## config file

```
SimplificationType
                       = "DP"
Threshold
                       = 0.0
MinDist
                       = 0.0
RelaxDist
                       = 0.0
#are polylines independent or a feature class ?
#if false planar and non-planar intersections
#between polylines are not observed
IsFeatureClass
                       = false
#observe planar self-intersection
PlanarSelf
                       = false
#observe non-planar self-intersection
NonPlanarSelf
                       = false
#avoid introducing new self-intersections as a
#result of simplification
AvoidNewSelfIntersects = false
GeomRelation
                       = false
DistRelation
                       = false
SideRelation
                       = false
```

#### **Data**

### **Constraints**