

# Project 1: DNA origami design

ER02

January 20, 2017

## Abstract

Use CadNano and CanDo to design an Origami.

**Getting the softwares.** First, you will need the following softwares:

1. Register for free as a student to get a license for Maya 2015 at:

<http://www.autodesk.com/education/free-software/maya>

Then, download the Maya 2015 software from either AutoDesk or the USB key.

2. Download cadnano from:

<http://cadnano.org/license.htm#download>

3. Register for free to use CanDo at:

<http://cando-dna-origami.org/registration/>

**The project: Design a DNA origami.** Pick your favorite "pixelized" shape and design it as a DNA Origami. You might take inspiration from:

<http://www.dna.caltech.edu/Papers/DNAorigami-nature.pdf>

1. Design your 2D DNA origami using cadnano
2. Check your design using CanDo (is it flat?)
3. Repeat 1.-2. until it is flat
4. Add some 3D stuff to your DNA origami!