

Tubular Origami Catalogue



Tube (Sec. III-A1, Alg. 1)

Connects modules with a linear offset



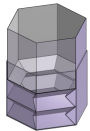
Twist Fitting (Sec. III-A2, Alg. 2)

Connects modules with a twist offset



Elbow Fitting (Sec. III-A3, Alg. 3)

Connects modules with a bent angle



Prismatic Joint (Sec. III-B1, Alg. 4)

Allows one-DOF translation



Revolute Joint (Sec. III-B2, Alg. 5)

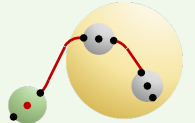
Allows one-DOF rotation

Input: D-H Specification

Kinegami (Sec. VI, Alg. 10)

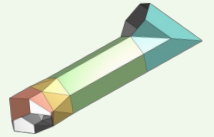
Joint Placement (Sec. V, Alg. 8 & 9)

Place each joint such that they satisfy kinematic and volumetric constraints



Link Generation (Sec. IV-B, Alg. 7)

Find the module composition that connects any two bases



Crease Pattern Composition (Sec. IV-A, Alg. 6)

Output: Crease Pattern