Title: Knot Families and their θ Invariant.
Supervisor: Dror Bar-Natan

The primary purpose of this project will be to code as many "families" of knots as you can identify in a way that will be clean and useful for others. A secondary purpose will be to compute the θ invariant of many knots in these families, in the hope of finding patterns and making conjectures. You may want to listen to my talk at http://drorbn.net/to24 to see what θ is about.

Requirements: You must be excellent at combinatorial programming in Mathematica.

Warning: There is a fair chance that I will be away for a good portion of the summer, or possibly even for all of it. So much of our communication will have to occur over zoom.