DROR BAR-NATAN, University of Toronto, Mathematics

Computing the Zombian of an Unfinished Columbarium

The zombies need to compute a quantity, the zombian, that pertains to some structure - say, a columbarium. But unfortunately (for them), a part of that structure will only be known in the future. What can they compute today with the parts they already have to hasten tomorrow's computation?

That's a common quest, and I will illustrate it with a few examples from knot theory and with two examples about matrices - determinants and signatures. I will also mention two of my dreams (perhaps delusions): that one day I will be able to reproduce, and extend, the Rolfsen table of knots using code of the highest level of beauty.

See also http://drorbn.net/ott23.