Supervisor's Report on Master's Thesis

Radek Olšák: Products of Boolean Clones up to Minion Homomorphisms

The thesis contributes to the project of describing the ordering of clones induced by minion homomorphisms. The elements in this partially ordered class are equivalence classes of clones, where two clones are considered equivalent if there exists a minion homomorphism between them in both directions. The ordering of the equivalence classes is by the existence of a minion homomorphism. Each equivalence class can be represented in an essentially unique way (up to minion isomorphism) by the so-called minion core of the clones therein.

The thesis fully describes the ordering of those multi-sorted Boolean clones that are products of single-sorted Boolean clones. This is an original and interesting result. The result will be submitted to an impacted journal, perhaps also including the computation of minion cores, which Radek obtained but did not include into the thesis. Radek worked on the results and on the thesis independently, my input was small. The thesis is nicely written: it is clear, concise, and the text is accompanied with numerous figures.

I think this is a very good thesis and I recommend the thesis be accepted.

Prague, 2 September 2024

Libor Barto