A Cross-Section of CPL Research: Some Visualisations

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The Computational Philosophy Lab was established in 2025 to conduct philosophical research using computational methods and to reflect critically and constructively on the nature, uses, and societal impacts of artificial intelligence. In this talk, I briefly present three projects CPL researchers are engaged in: (1) AI Ethics Literature Review, (2) Graph-theoretic Proofs in Propositional Logic and (3) PolyGraphs. The first project employs NLP and graph analysis of c. 7k JSTOR papers to map topics, trends, and networks across sectors and disciplines. The second project utilises graph-theoretic methods to represent propositional logic proofs as graphs in order to make them easier to learn, and, as a possible bonus, to improve proof heuristics. The third project provides an agent-based simulation framework that examines information sharing in social networks. Various visualisations of the results of these projects are displayed and discussed.