

## **The Graph Brain Project**

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We describe a continuing research project involving the coding of a large number of graphs, their invariants, properties and values, in the context of their use with the CONJECTURING program in generating conjectured upper and lower bounds for graph invariants, and necessary or sufficient conditions for graph properties.

We will mention some theorems and open conjectures on independence number and hamiltonicity as examples.

Keywords: automated conjecturing, experimental mathematics, independence number, hamiltonicity.