

Computational Logic Lab

[Web Site](#)

The SFU Computational Logic Lab is a group of researchers interested in the study of logics which are useful for expressing or solving computational problems, and the computational properties of those logics.

There are many connections between logic and computation. Historically, the best-known is in the study of computability, which also led to the discovery of deep connections between logic and complexity theory. Other areas where logic has played an important role in progress on problems of computational interest include programming languages, database theory, artificial intelligence, system specification and verification.

Interests of the members of the group include, among other areas, logics for knowledge representation and for representing and reasoning about dynamic systems, belief revision, theorem proving, constraint satisfaction, database theory, and complexity of related computational tasks.

Current research work includes:

- Knowledge Representation and Reasoning in Artificial Intelligence
- Combinatorics, Optimization and Complexity Theory
- Propositional satisfiability and finite domain constraint satisfaction
- Machine Learning
- Logic and Computation