

Introduction to Logic Topics:

Propositional logic, propositional analysis, direct proofs in Propositional logic, proof systems, Hilbert's system in propositional logic, natural deduction in propositional logic, Fitch's system in propositional logic, propositional resolution, Relational Logic, Herbrand Semantics, Relational Evaluation, satisfaction and analysis, prenex form, model checking, fitch proof for relational logic, Functional logic, Metalevel logic, formalization of propositional logic using Herbrand logic, non compactness and incompleteness of herbrand logic, undecidability, linear induction, tree induction, structural induction, Relational resolution, clausal form in relational logic, unification