Dependent Types and Theorem Proving: Proving is programming in disguise

Wojciech Kołowski

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1. Constructive propositional logic: you already know it
    - Propositional logic
    - Propositions are types, proofs are programs
        - Function types are implications
        - Sum is disjunction
        - Product is conjunction
        - Unit is True
        - Falsity and negation
2. First-order logic: you already know it
    - Predicates and relations
    - Universal quantifier is the dependent function type
    - Existential quantifier is the dependent pair type
3. Induction is recursion
4. Inductive predicates and relations
    - Undecidability and generative thinking
    - Proof relevance
    - Equality
5. Axioms and classical logic
6. How to find proofs

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