Research output

An axiomatization of information flow measures

Abstract Hidden Markov Models: a monadic account of quantitative information flow

Generalised differential privacy for text document processing

Schedulers and finishers: on generating and filtering the behaviours of an event structure

A new proof rule for almost-sure termination

An algebraic approach for reasoning about information flow

Conditioning in probabilistic programming

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Processing text for privacy: an information flow perspective

Privacy in elections: How small is "small"?
Algebra for quantitative information flow

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Reasoning about distributed secrets

Probabilistic rely-guarantee calculus

Axioms for information leakage

Program refinement, perfect secrecy and information flow

Schedulers and finishers: On generating the behaviours of an event structure

Conditioning in Probabilistic Programming

Abstract hidden Markov models: a monadic account of quantitative information flow

Hidden-Markov program algebra with iteration

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Hopscotch - reaching the target hop by hop

Operational versus weakest pre-expectation semantics for the probabilistic guarded command language

Abstractions of non-interference security: Probabilistic versus possibilistic

Abstract channels and their robust information-leakage ordering

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An event structure model for probabilistic concurrent Kleene algebra

Prinsys - On a quest for probabilistic loop invariants

Probabilistic concurrent Kleene algebra

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A Kantorovich-monadic powerdomain for information hiding, with probability and nondeterminism

A process algebra for wireless mesh networks

A rigorous analysis of AODV and its variants

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Operational versus weakest precondition semantics for the probabilistic guarded command language

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Security, probability and nearly fair coins in the cryptographers' café

Sums and lovers: Case studies in security, compositionality and refinement

The secret art of computer programming

Using probabilistic Kleene algebra pKA for protocol verification

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Results on the quantitative μ-calculus qMμ

Automating refinement checking in probabilistic system design

Formal techniques for the analysis of wireless networks

A Novel Stochastic Game Via the Quantitative μ-calculus

Developing and reasoning about probabilistic programs in pGCL

Programming-logic analysis of fault tolerance: expected performance of self-stabilisation

Quantitative refinement and model checking for the analysis of probabilistic systems

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Using probabilistic kleene algebra for protocol verification

Probabilistic guarded commands mechanized in HOL

Memoryless strategies for stochastic games via domain theory
An elementary proof that Herman's Ring is $\Theta(N^2)$

Probabilistic Guarded Commands Mechanized in HOL

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Abstraction, refinement and proof for probabilistic systems

Compositional specification and analysis of cost-based properties in probabilistic programs

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Cost-based analysis of probabilistic programs mechanised in HOL

Deriving probabilistic semantics via the 'weakest completion'

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Cost analysis of games, using program logic

A generalisation of stationary distributions, and probabilistic program Algebra

Partial correctness for probabilistic demonic programs

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