Research output

An axiomatization of information flow measures

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

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Conditioning in Probabilistic Programming

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

Hidden-Markov program algebra with iteration


Additive and multiplicative notions of leakage, and their capacities

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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

Towards a formal analysis of information leakage for signature attacks in preferential elections

An event structure model for probabilistic concurrent Kleene algebra

Prinsys - On a quest for probabilistic loop invariants

Probabilistic concurrent Kleene algebra

Statistical model checking of wireless mesh routing protocols

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A process algebra for wireless mesh networks
A rigorous analysis of AODV and its variants

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Graphical modelling for simulation and formal analysis of wireless network protocols

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

CaVi - Simulation and model checking for wireless sensor networks

Proofs and refutations for probabilistic refinement

Results on the quantitative μ-calculus qM\(\mu\)
McIver, A. & Morgan, C. 1 Jan 2007 In : ACM Transactions on Computational Logic. 8, 1, p. 1-43 43 p., 3

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

Quantitative μ-calculus analysis of power management in wireless networks

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 Θ(N^2)

Probabilistic Guarded Commands Mechanized in HOL

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Development via refinement in probabilistic B - Foundation and case study

Towards automated proof support for probabilistic distributed systems

Cost-based analysis of probabilistic programs mechanised in HOL

Deriving probabilistic semantics via the 'weakest completion'

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Probabilistic termination in B

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Games, probability, and the quantitative μ-calculus qMμ

Cost analysis of games, using program logic

A generalisation of stationary distributions, and probabilistic program Algebra

Partial correctness for probabilistic demonic programs
Almost-certain eventualities and abstract probabilities in quantitative temporal logic

Demonic, angelic and unbounded probabilistic choices in sequential programs

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