Bio

Michael Genesereth
Associate Professor of Computer Science and, by courtesy, of Law

Genesereth is most known for his work on Computational Logic and applications of that work in Enterprise Management, Computational Law, and General Game Playing. He is one of the founders of Teknowledge, CommerceNet, Mergent Systems, and Symbium. Genesereth is the director of the Logic Group at Stanford and the founder and research director of CodeX - the Stanford Center for Legal Informatics.

ACADEMIC APPOINTMENTS

• Associate Professor, Computer Science
• Associate Professor (By courtesy), Stanford Law School
• Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)

ADMINISTRATIVE APPOINTMENTS

• Research Director, CodeX: The Stanford Center for Legal Informatics, (2005- present)

PROGRAM AFFILIATIONS

• Symbolic Systems Program

PROFESSIONAL EDUCATION

• PhD, Harvard University (1978)

LINKS

• http://logic.stanford.edu/people/genesereth: http://logic.stanford.edu/people/genesereth

Teaching

COURSES

2021-22

• Computational Logic: CS 157 (Aut)
• General Game Playing: CS 227B (Spr)
• Logic Programming: CS 151 (Spr)

2020-21

• Computational Law: CS 204 (Spr)
• Computational Law: LAW 4019 (Spr)
• Computational Logic: CS 157 (Aut)
• Logic Programming: CS 151 (Spr)

2019-20
• Computational Logic: CS 157 (Aut)
• Knowledge Graphs: CS 520 (Spr)
• Logic Programming: CS 151 (Spr)

2018-19
• Computational Logic: CS 157 (Aut)
• General Game Playing: CS 227B (Spr)
• Legal Informatics: CS 204 (Spr)
• Legal Informatics: LAW 4019 (Spr)
• Logic Programming: CS 151 (Spr)

STANFORD ADVISEES
Master's Program Advisor
Jack Chapman, Caroline Gao, Chenxi Gu, Sina Jandaghi Semnani, Muhammad Khattak, Hanson Lu, Teresa Noyola, Shaham Parvin, Daniel Zeng, Joseph Zhu

Publications

PUBLICATIONS

• Data Integration - The Relational Logic Approach
  Genesereth, M., R.
  Morgan-Claypool.2010

• Computational Law
  Love, N., Genesereth, M., R.
  2005

• Axiom Schemata as Metalevel Axioms: Model Theory
  Hinrichs, T., L., Genesereth, M., R.
  2005

• PrediCalc: A Logical Spreadsheet Management System
  Kassoff, M., Zen, L., Garg, A., Genesereth, M., R.
  2005

• Database Reformulation with Integrity Constraints
  Chirkova, R., Genesereth, M., R.
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• General Game Playing - Overview of the AAAI Competition AAAI Magazine
  Genesereth, M., R., Love, N., Pell, B.
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• Linearly Bounded Reformulations of Unary Databases
  Chirkova, R., Genesereth, M., R.
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• Linearly Bounded Reformulations of Conjunctive Databases
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• Database Reformulation
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• Dervish in AI-based Mobile Robots: Case Studies of Successful Robot Systems
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  Duschka, O., Genesereth, M., R.
  1998

• Teaching AI Using Robots in AI-based Mobile Robots: Case Studies of Successful Robot Systems
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• Using Infomaster to Create a Housewares Virtual Catalog
  Journal of Electronic Markets, Institute for Media and Communication Management, University of St. Gallen, Switzerland
  Keller, A., M., Genesereth, M., R.
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• Proceedings of the Sixth International World Wide Web Conference
  edited by Genesereth, M., R., Patterson, A.
  Elsevier.1997

• Abstraction in Planning and Execution
  Logic Group, Stanford University Computer Science Department
  Nourbakhsh, I., Genesereth, M., R.
  1997

• Infomaster - An Information Integration Tool
  Duschka, O., Genesereth, M., R.
  1997

• Infomaster: An Information Integration System
  Genesereth, M., R., Keller, A., M., Duschka, O.
  1997

• Answering Recursive Queries Using Views
  Duschka, O., Genesereth, M., R.
  1997

• Query Planning in Infomaster
  Duschka, O., Genesereth, M., R.
  1997

• An Agent-Based Framework for Interoperability
  in Software Agents
  Genesereth, M., R.
  edited by Bradshaw, J.
  AAAI Press.1997: 1

• Assumptive Planning and Execution: A Simple
  Working Robot Architecture, Autonomous Robots
  Nourbakhsh, I., Genesereth, M., R.
  1996; 3: 49-67

• Stanford Information Network
  Logic Group, Stanford University Computer Science Department
  Genesereth, M., R., Keller, M., A., Mueller, G., C.
  1996
- Concurrent Engineering through Interoperable Software Agents
  Khedro, T., Genesereth, M., R., Teicholz, P.
  1994

- A Framework for Collaborative Distributed Facility Engineering
  Khedro, T., Genesereth, M., R., Teicholz, P.
  1994

- Modeling Multiagent Cooperation as Distributed Constraint Satisfaction Problem Solving
  Khedro, T., Genesereth, M., R.
  1994

- Solution Consistency and Convergence in Cooperative Distributed Problem Solving
  Khedro, T., Genesereth, M., R.
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- Single Phase Agreements Among Rational Agents in Journal of Experimental and Theoretical Artificial Intelligence
  Rosenschein, J., S., Genesereth, M., R.
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- From Dart to Designworld: A Chronicle of Research on Automated Engineering in The Stanford Logic Group Artificial Intelligence, to appear
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- Agent-Based Technology for Facility Design Software Integration
  Khedro, T., Teicholz, P., M., Genesereth, M., R.
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- A Formal Approach to Interdisciplinary Communication of Facility Design Information International Journal for Artificial Intelligence in Engineering
  Khedro, T., Teicholz, P., M., Genesereth, M., R.
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- Collaborative Distributed Facility Engineering Through Agent-Based Software Integration
  Khedro, T., Genesereth, M., R.
  1993

- Time-Saving Tips for Problem Solving with Incomplete Information
  Genesereth, M., R., Nourbakhsh, I.
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- PACT: An Experiment in Integrating Concurrent Engineering Systems Computer
  Cutkosky, M., Engelmore, R., S., Fikes, R., E., Genesereth, M., R., Gruber, T., R., Mark, W., S.

- Progressive Negotiation: A Strategy for Resolving Conflicts in Cooperative Distributed Multidisciplinary Design
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- FCDA: A Framework for Collaborative Distributed Multidisciplinary Design
  Khedro, T., Genesereth, M., R., Teicholz, P., M.
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- An Agent-Based Framework for Integrated Facility Engineering International Journal for Engineering with Computers
  Khedro, T., Genesereth, M., R., Teicholz, P., M.
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- An Agent-Based Approach for Integrated Design Environments
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• Agent-Based Concurrent Engineering
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  1992

• Partial Programs
  Genesereth, M., R., Hsu, J., Y.
  edited by Allen, J., Fikes, R., Sandewall, E.
  1991

• A Comparative Analysis of Some Simple Architectures for Autonomous Agents
  Architectures for Cognition
  Genesereth, M., R.
  edited by vanLehn, K., Erlbaum, L.
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• Designworld
  Genesereth, M., R.
  1991

• A Fast Algorithm for Automatic Theorem Proving with Equality
  Logic-91-2, Stanford University Computer Science Department
  Sikka, V., Genesereth, M., R., Singh, N.
  1991

• Knowledge Interchange Format
  Genesereth, M., R.
  edited by Allen, J., Fikes, R., Sandewall, E.
  1991

• Epikit: A Library of Subroutines Supporting Declarative Representation and Reasoning
  Singh, N., P., Genesereth, M., R.
  1991

• Discrete Systems Theory
  Logic-89-6, Stanford University Computer Science Department
  Genesereth, M., R.
  1989

• Deals Among Rational Agents
  in The Ecology of Computation
  Rosenschein, J., S., Genesereth, M., R.
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• Choosing Directions for Rules
  Journal of Automated Reasoning
  Treitel, R., Genesereth, M., R
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• Introspective Fidelity
  in Metalevel Architectures and Reflection
  Genesereth, M., R.
  edited by Maes, P.
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• Logical Foundations of Artificial Intelligence
  Genesereth, M., R., Nilsson, N., J.
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• The Relevance of Irrelevance
  Subramanian, D., Genesereth, M., R.
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• Communication and Cooperation
  Rosenschein, J., S., Genesereth, M., R.
• Cooperation Without Communication
  Genesereth, M., R., Ginsberg, M., L., Rosenschein, J., S.
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• Choosing Directions for Rules
  Treitel, R., Genesereth, M., R.
  1986

• Ordering Conjuncts in Problem Solving Artificial Intelligence
  Smith, D., E., Genesereth, M., R.
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• Deals Among Rational Agents
  Rosenschein, J., S., Genesereth, M., R.
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  Singh, V., Genesereth, M., R.
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• PM: A Parallel Execution Model for Backward Chaining Deductions Future Computing Systems
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• Expressiveness and Language Choice Data and Knowledge Engineering

• Choosing Directions for Rules KSL-85-46, Stanford University Heuristic Programming Project
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• Procedural Hints in the Control of Reasoning HPP-84-11, Stanford University Heuristic Programming Project
  Genesereth, M., R., Smith, D., E.
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• The Use of Hierarchical Design Models in the Automated Diagnosis of Computer Systems in Qualitative Reasoning about Physical Systems
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  Mackinlay, J., Genesereth, M., R.
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  Genesereth, M., R., Smith, D., E.
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  Greiner, R., Genesereth, M., R.
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• Residue: A Deductive Approach to Design *HPP-83-46, Stanford University Heuristic Programming Project*
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  Davis, R., Doyle, J., Genesereth, M., R., Goldstein, I., Lenat, D., Shrobe, H.
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  Genesereth, M., R.
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• The Role of Plans in Intelligent Teaching Systems *in Intelligent Teaching Systems*
  Genesereth, M., R.
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• Why *HPP-80-19, Stanford University Heuristic Programming Project*
  Genesereth, M., R.
  1980

• Metaphors and Models
  Genesereth, M., R.
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• Metaphors and Models *HPP-80-20, Stanford University Heuristic Programming Project*
  Genesereth, M., R.
  1980

• The Use of Semantics in a Tablet-Based Program for Selecting Parts of Mathematical Expressions"*
  Genesereth, M., R.
  1979

• The Advanced Scientific Computing Environment Project
  1979

• Automated Consultation for Complex Computer Systems
  Genesereth, M., R.
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• The Canonicality of Rule Systems
  Genesereth, M., R.
  1979

• The Difficulties of Using Macsyma and the Functions of User Aids
  Genesereth, M., R.
  1977
• **A Fast Inference Algorithm for Semantic Networks** *Memo, M.I.T. Mathlab Group*
  Genesereth, M., R
  1977

• **Multi-Vendor Catalogs: Smart Catalogs and Virtual Catalogs**
  Keller, A., M., Genesereth, M., R.