Stanford



Ross Shachter

Associate Professor of Management Science and Engineering

CONTACT INFORMATION

- **Administrative Contact**

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Bio

BIO

Ross Shachter joined Stanford's faculty directly after receiving his Ph.D. degree. His doctoral dissertation developed a method for purchasing an expert's forecast that encourages accurate revelation of the expert's beliefs as probabilities. Since then his research has focused on the representation, manipulation, and analysis of uncertainty and probabilistic reasoning in decision systems. He developed many of the fundamental methods for analyzing Bayesian belief networks and influence diagrams, and showed how they could be used by people and machines to communicate complex relationships among uncertain quantities, decisions, and objectives. His current research focuses on modeling uncertain processes and decision#making, including medical policy, meta-analysis, and intelligent systems. He has analyzed cancer screening processes for bladder and breast cancer and vaccination strategies for HIV and Helicobacter pylori.

His research interests include:

Influence diagram knowledge representation and solution;

Intelligent decision systems;

Medical decision analysis;

Decision analysis fundamentals; and

Planning under uncertainty

ACADEMIC APPOINTMENTS

- Associate Professor, Management Science and Engineering
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Member, Stanford Cancer Institute
- Affiliate, Stanford Woods Institute for the Environment

ADMINISTRATIVE APPOINTMENTS

- John A. and Cynthia Fry Gunn University Fellow in Undergraduate Education, VPUE, (2021-2031)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Board Chair, Association for Uncertainty in Artificial Intelligence (2018 - 2020)
- Treasurer, Association for Uncertainty in Artificial Intelligence (2016 - 2018)
- Secretary, Association for Uncertainty in Artificial Intelligence (2014 - 2016)

PROFESSIONAL EDUCATION

- BS, Massachusetts Institute of Technology , Management (1976)
- PhD, UC Berkeley , Operations Research (1982)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Prof. Shachter joined Stanford's faculty directly after receiving his Ph.D. degree. His doctoral dissertation developed a method for purchasing an expert's forecast that encourages accurate revelation of the expert's beliefs as probabilities. Since then his research has focused on the representation, manipulation, and analysis of uncertainty and probabilistic reasoning in decision systems. As part of this work, he developed the DAVID influence diagram processing system for the Macintosh. He has developed models scheduling patients for cancer follow-up, and analyzing vaccination strategies for HIV and Helobacter pylori.

He has worked closely with many students in Bioinformatics, where he held a courtesy appointment. He has been active in the Conference on Uncertainty in Artificial Intelligence, is a full member of INFORMS and its Decision Analysis Society. He has held memberships in the American Association for Artificial Intelligence, the Society for Medical Decision Making, and the Society for Decision Professionals.

Teaching

COURSES

2026-27

- Discrete Probability Concepts And Models: MS&E 20 (Sum)
- Foundations of Decision Analysis: MS&E 252 (Aut)
- Influence Diagrams and Probabilistics Networks: MS&E 355 (Spr)
- Introduction to Decision Analysis: MS&E 152 (Win)

2025-26

- Decision Analysis Seminar: MS&E 454 (Spr)
- Discrete Probability Concepts And Models: MS&E 20 (Sum)
- Foundations of Decision Analysis: MS&E 252 (Aut)
- Influence Diagrams and Probabilistics Networks: MS&E 355 (Spr)
- Introduction to Decision Analysis: MS&E 152 (Win)

2024-25

- Decision Analysis Seminar: MS&E 454 (Spr)
- Discrete Probability Concepts And Models: MS&E 20 (Sum)
- Foundations of Decision Analysis: MS&E 252 (Aut)
- Influence Diagrams and Probabilistics Networks: MS&E 355 (Spr)

- Introduction to Decision Analysis: MS&E 152 (Win)

2023-24

- Decision Analysis Seminar: MS&E 454 (Aut, Win, Spr)
- Discrete Probability Concepts And Models: MS&E 20 (Sum)
- Foundations of Decision Analysis: MS&E 252 (Win)
- Introduction to Decision Analysis: MS&E 152 (Spr)
- Probabilistic Analysis: MS&E 220 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Advisor (AC)

Andrew Couch, Morgan Knowlton, Samuel Liu

Master's Program Advisor

Ramesh Manian

Doctoral (Program)

Ramesh Manian

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Biomedical Data Science (PhD Program)

Publications

PUBLICATIONS

- **Fifty years of decision analysis in operational research: A review** *European Journal of Operational Research*
  Borgonovo, E., Jose, V., Knowlton, M., Shachter, R., Siebert, J., Ulu, C.
  2025
- **Uncovering interpretable potential confounders in electronic medical records.** *Nature communications*
  Zeng, J., Gensheimer, M. F., Rubin, D. L., Athey, S., Shachter, R. D.
  2022; 13 (1): 1014
- **Why Did They Do That?** *Probabilistic and Causal Inference: The Works of Judea Pearl*
  Shachter, R., Heckerman, D.
  Association for Computing Machinery.2022: 805-812
- **Natural Language Processing to Identify Cancer Treatments With Electronic Medical Records.** *JCO clinical cancer informatics*
  Zeng, J., Banerjee, I., Henry, A. S., Wood, D. J., Shachter, R. D., Gensheimer, M. F., Rubin, D. L.
  2021; 5: 379–93
- **A Probabilistic Model to Support Radiologists' Classification Decisions in Mammography Practice** *MEDICAL DECISION MAKING*
  Zeng, J., Gimenez, F., Burnside, E. S., Rubin, D. L., Shachter, R.
  2019; 39 (3): 208–16
- **Prophylactic Fixation Can Be Cost-effective in Preventing a Contralateral Bisphosphonate-associated Femur Fracture** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*
  Jiang, S. Y., Kaufman, D. J., Chien, B. Y., Longoria, M., Shachter, R., Bishop, J. A.
  2019; 477 (3): 480–90
- **A Web-based Decision Tool to Estimate Subarachnoid Hemorrhage Risk in Emergency Department Patients** *Cureus*
  Manella, H., Sivasankar, S., Perry, J., Pfeil, S., Senyak, J., Shachter, R., Govindarajan, P.
  2018; 10 (1)

- **Dynamic Strategy for Personalized Medicine: An Application to Metastatic Breast Cancer.** *Journal of biomedical informatics*
  Chen, X., Shachter, R., Kurian, A., Rubin, D.
  2017
- **Defense Science Board Summer Study on Autonomy**
  David, R., Nielsen, P., et al
  Office of the Under Secretary of Defense for Acquisition, Technology and Logistics. Washington, DC.
  2016 107
- **Decisions and Dependence in Influence Diagrams** *Proceedings of Machine Learning Research*
  Shachter, R. D.
  2016; 52: 462-473
- **Toward cost-effective staffing mixes for Veterans Affairs substance use disorder treatment programs.** *BMC health services research*
  Im, J. J., Shachter, R. D., Finney, J. W., Trafton, J. A.
  2015; 15: 515
- **Association of Care Practices with Suicide Attempts in US Veterans Prescribed Opioid Medications for Chronic Pain Management** *JOURNAL OF GENERAL INTERNAL MEDICINE*
  Im, J. J., Shachter, R. D., Oliva, E. M., Henderson, P. T., Paik, M. C., Trafton, J. A.
  2015; 30 (7): 979-991
- **Complexity of the Exact Solution to the Test Sequencing Problem** *Thirty-First Conference on Uncertainty in Artificial Intelligence*
  Liu, W., Shachter, R. D.
  edited by Heskes, T., Meila, M.
  AUAI.2015: 494–503
- **Complex Operational Decision Making in Networked Systems of Humans and Machines: A Multidisciplinary Approach**
  edited by ISBN 978-0-309-30770-3 102 pages 8.5 x 11 PAPERBACK (2014) Committee on Integrating Humans, Machines and Networks, A. National Academies Press.2014
- **Approximate Kalman Filter QLearning for Continuous StateSpace MDPs.** *Proceedings of the Twenty-Ninth Conference on Uncertainty In Artificial Intelligence*
  AUAI.2013
- **Formulating Asymmetric Decision Problems as Decision Circuits** *DECISION ANALYSIS*
  Bhattacharjya, D., Shachter, R. D.
  2012; 9 (2): 138-145
- **Backtracking for More Efficient Large Scale Dynamic Programming.** *Proceedings of the Eleventh International Conference on Machine Learning and Applications, Boca Raton, FL*
  2012
- **Strictly Proper Mechanisms with Cooperating Players.** *Proceedings of the Twenty-Seventh Conference on Uncertainty in Artificial Intelligence*
  AUAI.2011
- **Dynamic programming in influence diagrams with decision circuits.** *Proceedings of the Twenty-Sixth Conference on Uncertainty in Artificial Intelligence*
  AUAI.2010
- **Pearl Causality and the Value of Control.** *Heuristics, Probability, and Causality: A Tribute to Judea Pearl*
  Shachter, R., D., Heckerman, D., E.
  edited by Dechter, R., Geffner, H., Halpern, J., Y.
  College Publications..2010: 431–447
- **Solving influence diagrams: exact algorithms.** *Wiley Encyclopedia of Operations Research and Management Science. Wiley.*
  Shachter, R., Bhattacharjya, D.
  edited by Cochran, J., J.
  2010

- **Three new sensitivity analysis methods for influence diagrams.** *Proceedings of the Twenty-Sixth Conference on Uncertainty in Artificial Intelligence*
  AUAI.2010
- **Cost-Effectiveness of a Potential Prophylactic Helicobacter pylori Vaccine in the United States** *JOURNAL OF INFECTIOUS DISEASES*
  Rupnow, M. F., Chang, A. H., Shachter, R. D., Owens, D. K., Parsonnet, J.
  2009; 200 (8): 1311-1317
- **Are Patients Getting the oGisto in Risk Communication? Patient Understanding of Prognosis in Breast Cancer Treatment** *JOURNAL OF CANCER EDUCATION*
  Hutton, D. W., Belkora, J. K., Shachter, R. D., Moore, D. H.
  2009; 24 (3): 194-199
- **How can economic schemes curtail the increasing sex ratio at birth in China?** *DEMOGRAPHIC RESEARCH*
  Bhattacharjya, D., Sudarshan, A., Tuljapurkar, S., Shachter, R., Feldman, M.
  2008; 19: 1831-1850
- **How can economic schemes curtail the increasing sex ratio at birth in China?** *Demographic research*
  Bhattacharjya, D., Sudarshan, A., Tuljapurkar, S., Shachter, R., Feldman, M.
  2008; 19 (54): 1831-1850
- **Sensitivity analysis in decision circuits.** *Proceedings of the Twenty-Fourth Conference on Uncertainty in Artificial Intelligence*
  AUAI.2008
- **Evaluating influence diagrams with decision circuits.** *Proceedings of the Twenty-Third Conference on Uncertainty in Artificial Intelligence*
  AUAI.2007
- **Model Building with Belief Networks and Influence Diagrams.** *Advances in Decision Analysis: From Foundations to Applications*
  Shachter, R., D.
  edited by Edwards, W., Ralph, J., Miles, F.
  Cambridge University Press..2007: 177–201
- **Bayesian network to predict breast cancer risk of mammographic microcalcifications and reduce number of benign biopsy results: Initial experience** *RADIOLOGY*
  Burnside, E. S., Rubin, D. L., Fine, J. P., Shachter, R. D., Sisney, G. A., Leung, W. K.
  2006; 240 (3): 666-673
- **Value of quantitative D-dimer assays in identifying pulmonary embolism: Implications from a sequential decision model** *ACADEMIC EMERGENCY MEDICINE*
  Duriseti, R. S., Shachter, R. D., Brandeau, M. L.
  2006; 13 (7): 755-766
- **Individualizing generic decision models using assessments as evidence** *JOURNAL OF BIOMEDICAL INFORMATICS*
  Scott, G. C., Shachter, R. D.
  2005; 38 (4): 281-297
- **Influence Diagrams for Team Decision Analysis.** *Decision Analysis*
  Detwarasiti, A., Shachter, R., D.
  2005; 2 (4): 207-228
- **Individualizing Generic Decision Models Using Assessments as Evidence.** *Journal of Biomedical Informatics*
  Scott, G., Shachter, R.
  2005; 4 (38): 281-29
- **A probabilistic expert system that provides automated mammographic-histologic correlation: Initial experience** *103rd Annual Meeting of the American-Roentgen-Ray-Society*
  Burnside, E. S., Rubin, D. L., Shachter, R. D., Sohlich, R. E., Sickles, E. A.
  AMER ROENTGEN RAY SOC.2004: 481–88

- **Using a Bayesian network to predict the probability and type of breast cancer represented by microcalcifications on mammography** *11th World Congress on Medical Informatics*
  Burnside, E. S., Rubin, D. L., Shachter, R. D.
  I O S PRESS.2004: 13–17

- **The Cost Effectiveness of Partially Effective HIV Vaccines.** *Operations Research and Health Care*
  Owens, D., Edwards, D., Cavallaro, J., Shachter, R.
  edited by Brandeau, M., Sainfort, F., Pierskalla, W.
  Kluwer..2004: 403–418

- **A Bayesian Network to Assist Mammography Interpretation.** *Operations Research and Health Care*
  Rubin, D., Burnsie, E., Shachter, R.
  edited by Brandeau, M., Sainfort, F., Pierskalla, W.
  Kluwer..2004: 695–702

- **Improving a Bayesian network's ability to predict the probability of malignancy of microcalcifications on mammography** *18th International Congress and Exhibition on Computer Assisted Radiology and Surgery (CARS 2004)*
  Burnside, E. S., Rubin, D. L., Shachter, R. D.
  ELSEVIER SCIENCE BV.2004: 1021–1026

- **Statistics and causal inference: A review - Discussion** *TEST*
  Fienberg, S. E., Haviland, A. M., Heckerman, D., Shachter, R., Kadane, J. B., Moral, S., Pearl, J.
  2003; 12 (2): 319-345

- **An approach to automate & individualize interactive decision support for patients** *Annual Symposium of the American-Medical-Informatics-Association*
  Scott, G. C., Shachter, R. D., Lenert, L. A.
  HANLEY & BELFUS INC MED PUBLISHERS.2002: 1158–1158

- **User-Agent Value Alignment.** *Proceedings of the 2002 AAAI Symposium*
  AAAI.2002

- **Costs and benefits of imperfect HIV vaccines: Implications for vaccine development and use** *14th Conference on Quantitative Evaluation of HIV Prvention Programs*
  Owens, D. K., Edwards, D. M., Shachter, R. D.
  YALE UNIV PRESS.2002: 143–171

- **Quantifying the population impact of a prophylactic Helicobacter pylori vaccine** *VACCINE*
  Rupnow, M. F., Shachter, R. D., Owens, D. K., Parsonnet, J.
  2001; 20 (5-6): 879-885

- **Second Opinion: A framework for using decision models to automate & individualize interactive patient decision support aids**
  Scott, G. C., Shachter, R., Lenert, L. A.
  BMJ PUBLISHING GROUP.2001: 833–833

- **Using background knowledge to speed reinforcement learning in physical agents.** *Proceedings of the Fifth International Conference on Machine Learning*
  2001

- **Using decision models to automate & individualize interactive patient-oriented decision support aids**
  Scott, G. C., Shachter, R., Lenert, L. A.
  BMJ PUBLISHING GROUP.2001: 1024–1024

- **A dynamic transmission model for predicting trends in Helicobacter pylori and associated diseases in the United States** *EMERGING INFECTIOUS DISEASES*
  Rupnow, M. F., Shachter, R. D., Owens, D. K., Parsonnet, J.
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- **A Bayesian network for mammography** *Annual Symposium of the American-Medical-Informatics-Association*
  Burnside, E., Rubin, D., Shachter, R.

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- **Helicobacter pylori vaccine development and use: A cost-effectiveness analysis using the institute of medicine methodology** *HELICOBACTER*
  Rupnow, M. F., Owens, D. K., Shachter, R., Parsonnet, J.
  1999; 4 (4): 272-280
- **Learning about H-pylori transmission dynamics from the distinct patterns of duodenal ulcer and gastric cancer**
  Tsugawa, M. F., Shachter, R., Owens, D. K., Parsonnet, J.
  W B SAUNDERS CO-ELSEVIER INC.1999: A338–A338
- **Predicting the next century of H-pylori prevalence and associated diseases in the United States**
  Tsugawa, M. F., Shachter, R., Owens, D. K., Parsonnet, J.
  W B SAUNDERS CO-ELSEVIER INC.1999: A339–A339
- **Efficient value of information computation** *15th Conference on Uncertainty in Artificial Intelligence*
  Shachter, R. D.
  MORGAN KAUFMANN PUB INC.1999: 594–601
- **Population effects of preventive and therapeutic HIV vaccines in early- and late-stage epidemics** *AIDS*
  Owens, D. K., Edwards, D. M., Shachter, R. D.
  1998; 12 (9): 1057-1066
- **A dynamic HIV-transmission model for evaluating the costs and benefits of vaccine programs** *INTERFACES*
  Edwards, D. M., Shachter, R. D., Owens, D. K.
  1998; 28 (3): 144-166
- **Bayes-Ball: The Rational Pastime (for Determining Irrelevance and Requisite Information in Belief Networks and Influence Diagrams).** *Uncertainty in Artificial Intelligence: Proceedings of the Fourteenth Conference*
  Shachter, R. D.
  1998
- **Learning from What You Don't Observe.** *Uncertainty in Artificial Intelligence: Proceedings of the Fourteenth Conference*
  Peot, M. A., Shachter, R. D.
  1998
- **Representation and analysis of medical decision problems with influence diagrams** *MEDICAL DECISION MAKING*
  Owens, D. K., Shachter, R. D., Nease, R. F.
  1997; 17 (3): 241-262
- **A measure of decision flexibility** *12th Conference on Uncertainty in Artificial Intelligence (UAI 96)*
  Shachter, R. D., Mandelbaum, M.
  MORGAN KAUFMANN PUB INC.1996: 485–491
- **Decision theoretic foundations for causal reasoning** *JOURNAL OF ARTIFICIAL INTELLIGENCE RESEARCH*
  Heckerman, D., Shachter, R.
  1995; 3: 405-430
- **A Definition and Graphical Representation for Causality.** *Uncertainty in Artificial Intelligence: Proceedings of the Eleventh Conference*
  Heckerman, D. E., Shachter, R. D.
  1995
- **Decision-Theoretic Foundations for Causal Reasoning.** *Journal of Artificial Intelligence Research*
  Heckerman, D., Shachter, R., D.
  1995; 3: 405-430
- **Decision Flexibility.**
  Chavez, T., Shachter, R., D.
  1995

- **A PHYSICIAN-BASED ARCHITECTURE FOR THE CONSTRUCTION AND USE OF STATISTICAL-MODELS** *METHODS OF INFORMATION IN MEDICINE*
  Lehmann, H. P., Shachter, R. D.
  1994; 33 (4): 423-432
- **Three Approaches to Probability Model Selection.**
  Poland, W., B., Shachter, R., D.
  1994
- **A method for the dynamic selection of models under time constraints.** *Selecting Models from Data: Artificial Intelligence and Statistics*
  Rutledge, G., Shachter, R., D.
  edited by Cheeseman, P., Oldford, R., W.
  New York: Springer-Verlag..1994: 79–88
- **A Decision-Based View of Causality.**
  Heckerman, D., E., Shachter, R., D.
  1994
- **Laplace's Method Approximations for Probabilistic Inference in Belief Networks with Continuous Variables.**
  Azevedo-Filho, A., Shachter, R., D.
  1994
- **Global Conditioning for Probabilistic Inference in Belief Networks.**
  Shachter, R., D., Andersen, S., K., Szolovits, P.
  1994
- **End-User Construction of Influence Diagrams for Bayesian Statistics:**
  Lehmann, H., P., Shachter, R., D.
  1993
- **A Method for the Dynamic Selection of Models Under Time Constraints**
  Rutledge, G., Shachter, R., D.
  edited by Cheeseman, P.
  1993
- **Using Potential Influence Diagrams for Probabilistic Inference and Decision Making:**
  Shachter, R., D., Ndilikilikesha, P., M.
  1993
- **Mixtures of Gaussians and Minimum Relative Entropy Techniques for Modeling Continuous Uncertainties.**
  Poland, W., B., Shachter, R., D.
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- **REPRESENTATION OF PREFERENCES IN DECISION-SUPPORT SYSTEMS** *COMPUTERS AND BIOMEDICAL RESEARCH*
  FARR, B. R., Shachter, R. D.
  1992; 25 (4): 324-335
- **DECISION-MAKING USING PROBABILISTIC INFERENCE METHODS** *8TH CONF ON UNCERTAINTY IN ARTIFICIAL INTELLIGENCE*
  Shachter, R. D., Peot, M. A.
  MORGAN KAUFMANN PUB INC.1992: 276–283
- **Patient-Specific Explanation in Models of Chronic Disease.** *AI in Medicine*
  Jimison, H., B., Fagan, L., M., Shachter, R., D., Shortliffe, E., H.
  1992; 3 (4): 191-205
- **Structural Controllability and Observability in Influence Diagrams.**
  Chan, B., Y., Shachter, R., D.
  1992
- **Meta-Analysis by the Confidence Profile Method: The Statistical Synthesis of Evidence.**

Eddy, D., M., Hasselblad, V., Shachter, R.
Boston: Academic Press..1992

- **Representation of Preferences in Decision Support Systems.** *Comput Biomed Res*
  Farr, B., R., Shachter, R., D.
  1992; 25 (4): 324-335
- **EVALUATION OF NONLINEAR OPTIMIZATION FOR SCHEDULING OF FOLLOW-UP CYSTOSCOPIES TO DETECT RECURRENT BLADDER-CANCER** *MEDICAL DECISION MAKING*
  Kent, D. L., NEASE, R. A., Sox, H. C., Shortliffe, L. D., Shachter, R.
  1991; 11 (4): 240-248
- **FUSION AND PROPAGATION WITH MULTIPLE OBSERVATIONS IN BELIEF NETWORKS** *ARTIFICIAL INTELLIGENCE*
  Peot, M. A., Shachter, R. D.
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- **Representation of preferences in decision-support systems.** *Proceedings / the ... Annual Symposium on Computer Application [sic] in Medical Care. Symposium on Computer Applications in Medical Care*
  FARR, B. R., Schachter, R. D.
  1991: 1018-1024
- **Directed Reduction Algorithms and Decomposable Graphs.** *Uncertainty in Artificial Intelligence*
  Shachter, R., D., Andersen, S., K., Poh, K., L.
  edited by Bonnisone, P., Henrion, M., Kanal, L., N.
  Amsterdam: North-Holland..1991: 197–208
- **A GRAPH-BASED INFERENCE METHOD FOR CONDITIONAL-INDEPENDENCE** *7th Conference on Uncertainty in Artificial Intelligence*
  Shachter, R. D.
  MORGAN KAUFMANN PUB INC.1991: 353–360
- **AN ORDERED EXAMINATION OF INFLUENCE DIAGRAMS** *NETWORKS*
  Shachter, R. D.
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- **DYNAMIC-PROGRAMMING AND INFLUENCE DIAGRAMS** *IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS*
  TATMAN, J. A., Shachter, R. D.
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- **AN INTRODUCTION TO A BAYESIAN METHOD FOR META-ANALYSIS - THE CONFIDENCE PROFILE METHOD** *MEDICAL DECISION MAKING*
  Eddy, D. M., Hasselblad, V., Shachter, R.
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- **Simulation Approaches to General Probabilistic Inference on Belief Networks.** *Uncertainty in Artificial Intelligence*
  Shachter, R., D., Peot, M.
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- **Evidence Absorption and Propagation through Evidence Reversals.** *Uncertainty in Artificial Intelligence*
  Shachter, R., D.
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- **An Influence Diagram Approach to Medical Technology Assessment.** *Influence Diagrams, Belief Nets, and Decision Analysis*
  Shachter, R., D., Eddy, D., M., Hasselblad, V.
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- **A Linear Approximation Method for Probabilistic Inference.** *Uncertainty in Artificial Intelligence*
  Shachter, R., D.
  edited by Shachter, R., D., Levitt, T., S., Lemmer, J., F.

Amsterdam: North-Holland..1990: 93–103

- **Dynamic Programming and Influence Diagrams.** *IEEE Transactions on Systems, Man and Cybernetics*
  Tatman, J., A., Shachter, R., D.
  1990; 2 (20): 365-379
- **An Ordered Examination of Influence Diagrams.** *Networks*
  Shachter, R., D.
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- **Directed Reduction Algorithms and Decomposable Graphs.**
  Shachter, R., D., Andersen, S., K., Poh, K., L.
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- **Symbolic Probabilistic Inference in Belief Networks.**
  Shachter, R., D., D'Ambrosio, B., Del Favero, B., A.
  1990
- **Uncertainty in Artificial Intelligence 5.**
  Henrion, M., Shachter, R., D., Lemmer, J., F., Kanal, L., N.
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  Shachter, R., D., Levitt, T., S., Lemmer, J., F., Kanal, L., N.
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- **A Bayesian method for synthesizing evidence. The Confidence Profile Method.** *International journal of technology assessment in health care*
  Eddy, D. M., Hasselblad, V., Shachter, R.
  1990; 6 (1): 31-55
- **AN INTRODUCTION TO A BAYESIAN METHOD FOR METAANALYSIS - THE CONFIDENCE PROFILE METHOD** *WORKSHOP ON IMPROVING THE TRANSLATION OF RESEARCH FINDINGS INTO CLINICAL PRACTICE : THE POTENTIAL AND PROBLEMS OF MODERN METHODS OF CLINICAL INVESTIGATION*
  Eddy, D. M., Hasselblad, V., Shachter, R.
  NATL ACADEMY PRESS.1990: 101–116
- **GAUSSIAN INFLUENCE DIAGRAMS** *MANAGEMENT SCIENCE*
  Shachter, R. D., Kenley, C. R.
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- **EFFICIENT SCHEDULING OF CYSTOSCOPIES IN MONITORING FOR RECURRENT BLADDER-CANCER** *MEDICAL DECISION MAKING*
  Kent, D. L., Shachter, R., Sox, H. C., HUI, N. S., Shortliffe, L. D., Moynihan, S., Torti, F. M.
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- **A Heuristic Bayesian Approach to Knowledge Acquisition: Application to the Analysis of Tissue-Type Plasminogen Activator.** *Uncertainty in Artificial Intelligence*
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- **Efficient Inference on Generalized Fault Diagrams.** *Uncertainty in Artificial Intelligence*
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- **Evidence Absorption and Propagation through Evidence Reversals.**
  Shachter, R., D.

1989

- **AN INFLUENCE DIAGRAM APPROACH TO HEALTH TECHNOLOGY-ASSESSMENT WITHIN THE CONFIDENCE PROFILE METHOD**
  Shachter, R. D., Eddy, D. M., Hasselblad, V.
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- **DECISION-THEORY FOR RETROSPECTIVE JUDGEMENTS OF DECISIONS**
  Yu, A., Kent, D. L., HIGGINS, M. C., Mazur, D. J., Sox, H. C., Evans, P. A., Shachter, R. D., Fujimura, I., Howard, R. A.
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