

CLAUDIA PERLICH

*Research Staff Member
Data Analytic Research Groups
IBM Research at Watson*

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EMPLOYMENT

- Since Oct 2004* **IBM Watson Research Center, Yorktown Heights, NY**
Research Staff Member, Data Analytics Research Group
- Data analysis
- Publication
- 1998-2002* **Stern School of Business, NY**
Research and Teaching Assistant
- December 2001* **Alexander Reisz, Baruch College, Zicklin School of Business, NY**
Research Assistant
- Extraction, Preparation and Analysis of Financial Data
- Jun-Aug, 1999* **IBM Watson Research Center, NY**
Summer Student working with Murray Campbell
- Mining Financial Data

EDUCATION

- 1998 - 2004* **Stern School of Business, New York University** New York, NY
Ph.D., Information Systems
- Thesis: "Probability Estimation in Multi-Relational Domains"
- 2003* Master of Science, Information Systems
- 1996 - 1998* **Technical University Darmstadt** Darmstadt, Germany
"Diplom" (Master of Sciences), Computer Science
- Thesis: "Residual reduction through a combination of physical and neural models"
- Major: Computer Science
- Minor: System Control and Process Automation
- Research Practicum: German National Research Center for Information Technology
"Evaluation of recommender systems"
- 1995 - 1996* **University of Colorado** Boulder, CO
Master of Sciences, Computer Science
- 1992 - 1995* **Technical University Darmstadt** Darmstadt, Germany
"Vordiplom" (Bachelor of Sciences), Computer Science

HONORS, AWARDS AND DISTINCTIONS

- 2003* ACM SIGKDD-CUP, Second Place
- 2003* Doctoral Consortium at ICIS

2002	Winner (Additional) – The SAP Doctoral Support Award, International Competition via Penn State's eBusiness Research Center-eBRC
2002-2003	Joseph Taggart Doctoral Fellowship
1998-2002	New York University Doctoral Fellowship
1996-1998	Scholarship from the “Studienstiftung des Deutschen Volkes” (German National Merit Scholarship Foundation)
1995-1996	Scholarship from the DAAD (German American Exchange Service)

RESEARCH INTERESTS

- Intelligent information systems for business applications
- Model estimation from complex data types, in particular multi-relational data
- Integration of background knowledge for modeling
- Distance measures in data mining and knowledge discovery
- Noise and performance measures
- Probability estimation and calibration
- Graph and network analysis

TEACHING EXPERIENCE

<i>Spring 2002</i>	Fundamentals of Computing Systems Instructor: C20.0035 Undergraduate course	NYU
<i>Fall 2000</i>	Telecommunications and Coordination Technology Instructor: C20.0045 Undergraduate course	NYU
<i>Spring 2002</i>	Topics in Knowledge Discovery and Machine Learning Co-Instructor: B20.3389 PhD Seminar	NYU
<i>Spring 2001</i>	Data Mining in Finance Teaching Assistant: B20.3355 Graduate course	NYU
<i>Fall 1999, 2000</i> <i>Spring 2000</i>	Fundamentals of Computing Systems Teaching Assistant: C20.0035 Undergraduate course	NYU
<i>Spring 1997</i>	Linear Algebra Teaching Assistant: Undergraduate course	Technical University Darmstadt

PUBLICATIONS AND PRESENTATIONS

Journal Papers:

“ACORA: Distribution-Based Aggregation for Relational Learning from Identifier Attributes”

Perlich, C. and F. Provost. Forthcoming in special issue on Statistical Relational Learning and Multi-Relational Data Mining, *Journal of Machine Learning*

“Predicting Citation Rates for Physics Papers: Constructing Features for an Ordered Probit Model”

Perlich, C., F. Provost, and S. Macskassy. In *SIGKDD Explorations* (2004) 154-155

“Tree Induction vs. Logistic Regression: A Learning Curve Analysis”

Perlich, C., F. Provost, and J. Simonoff. *Journal of Machine Learning Research* 4 (2003) 211-255

“Temporal Resolution of Uncertainty and Corporate Debt Yields: An Empirical Investigation”

Reisz, A.S. and C. Perlich. Forthcoming, *Journal of Business*

“A Market-Based Framework for Bankruptcy Prediction”

Reisz, A.S. and C. Perlich. Under review, *Journal of Financial Economics*

Conference and Workshop Papers:

“Approaching the ILP Challenge 2005: Class-Conditional Bayesian Propositionalization for Genetic Classification”

Perlich, C. Inductive Logic programming (ILP) 2005

“Important Challenges of Genetic and Other Domains”

Perlich, C., and S. Merugu. Workshop on Multi-Relational Data Mining (MRDM), at 11th SIGKDD International Conference on Knowledge Discovery and Data Mining 2005

“Ranking-Based Evaluation of Regression Models”

Perlich, C., S. Rosset and B. Zadrozny. Under review for International Conference on Machine Learning (ICDM) 2005

“Aggregation-Based Feature Invention and Relational Concept Classes”

Perlich, C. and F. Provost. Ninth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining 2003, 167-176

“Citation-Based Document Classification”

Perlich, C. Workshop on Information Technology and Systems (WITS) 2003

“Aggregation and Concept Complexity in Relational Learning”

Perlich, C. and F. Provost. Workshop on Learning Statistical Models from Relational Data (SRL), at IJCAI 2003

“Relational Learning Problems and Simple Models”

Provost, F., C. Perlich and S. Macskassy. Workshop on Learning Statistical Models from Relational Data (SRL), at IJCAI 2003

“ACORA: Automated Construction of Relational Attribute”

Perlich, C. Prototype Track at Workshop on Information Technology and Systems (WITS) 2002

“Discovering Knowledge from Relational Data Extracted from Business News”

Bernstein, A., S. Clearwater, S. Hill, C. Perlich and F. Provost. Workshop on Multi-Relational Data Mining (MRDM), at Eighth SIGKDD International Conference on Knowledge Discovery and Data Mining 2002

“A Modular Approach to Relational Data Mining”

Perlich, C. and F. Provost. American Conference on Information Systems (AMCIS) 2002

“Modeling of Scholastic Aptitude Tests”

Weigend, A.S., C. Perlich and M. Brehler
International Conference on Neural Information Processing (ICONIP) 1996

Invited Book Chapters:

“Aggregation for Predictive Modeling with Relational Data”

Perlich, C. and F. Provost
In Encyclopedia of Data Warehousing and Mining 2004

“Relational Modeling as Aggregation”

Perlich, C and F. Provost
Forthcoming, Editors: Lise Getoor

Additional Invited Presentations:

“Tree Induction vs. Logistic Regression for Learning Rankings based on Likelihood of Class Membership”

Workshop: Beyond Classification and Regression: Learning Rankings, Preferences, Equality Predicates, and Other Structures” Neural Information Processing Systems (NIPS) 2002

“Surfing Behavior and Direct Online Marketing”

AMAZON.com, Seattle, December 2003

“Automated Modeling in Complex Domains”

Boeing Research, Seattle, December 2003

Invited Participant: Dagstuhl Seminar 05051: “Probabilistic, Logical and Relational Learning - Towards a Synthesis” Organizer: L. De Raedt (Univ. Freiburg, DE), T. Dietterich (Oregon State Univ., US), L. Getoor (Univ. of Maryland, US), S. H. Muggleton (Imperial College London, GB), February 2005

PROFESSIONAL ACTIVITIES

Professional Memberships:

ACM

Referee:

NSF Panel
Journal of Machine Learning Research
Journal of Machine Learning
Management Science
Decision Support Systems
Journal of the Production and Operations Management Society
Journal of Data Mining and Knowledge Discovery
ACM SIGKDD
AMCIS
SIAM International Conference on Data Mining

Program Committee Member:

Workshop on Utility-Based Data Mining, SIGKDD 2005

OTHER INFORMATION

Date of Birth April 1974
Nationality German
Visa Status F-1 Foreign Student, Optional Practical Training
Native Language German

Other Languages Fluent in English, Fundamentals in Russian

References:

Foster Provost

Associate Professor of Information Systems

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Jeffrey Simonoff

Professor of Statistics,
Edythe and George Heyman Faculty Fellow

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