

Karin Kailing

Karin Kailing, Ph.D.
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- EXPERIENCE
- | | | |
|--------------|---|----------|
| 2005–to date | IBM Almaden Research Center | San Jose |
| | <i>Post Doctoral Researcher</i> | |
| | <ul style="list-style-type: none">Member of the Intelligent Information Systems GroupResearch on efficient query processing, and data privacy and security | |
| 2004–to date | Ludwig-Maximilians University | Munich |
| | <i>Post Doctoral Researcher</i> | |
| | <ul style="list-style-type: none">On leave of absence starting January 2005 (to IBM). | |
| 2001–2004 | Ludwig-Maximilians University | Munich |
| | <i>Research Assistant</i> | |
| | <ul style="list-style-type: none">Worked on a DFG (German Research Foundation) project to extend density-based clustering techniques to handle large collections of high-dimensional data; developed new techniques to cope with the high dimensionality of real world data sets.Took part in BFAM (<i>Bioinformatics for the Functional Analysis of Mammalian Genomes</i>), a joint project of university and industry partners. I developed prototype applications to analyze microarray data.Worked on a project to support similarity search in Medical Imaging, Molecular Biology, Spatial and Multimedia databases. My focus was on developing efficient and effective techniques to retrieve similar color images.Assisted in developing a research grant proposal to the Deutsche Forschungsgemeinschaft (German Research Foundation)
Topic: Efficient and effective data mining solutions for complex objects | |
| 2001–2004 | Ludwig-Maximilians University | Munich |
| | <i>Teaching Assistant</i> | |
| | <ul style="list-style-type: none">Organized seminar-style class on Knowledge Discovery in DatabasesPrepared and delivered tutorials on the following topics<ul style="list-style-type: none">Knowledge Discovery in DatabasesGeographical Information SystemsMultimedia Database SystemsEfficient algorithmsComputer Science ISupervised 8 diploma theses on diverse topics | |

Karin Kailing

1995–2004 OSRAM GmbH Munich

Part-time job as SAP HR Specialist and Sales Assistant

- 2001-to date (8h/week):
 - Coordinate new activities related to SAP HR
 - Mediate between IT and HR departments
- 1997-2001 (20h/week)
 - Project member for implementation of SAP R/3 HR at OSRAM Germany
 - Customized the HR module of SAP to the needs of all HR departments of OSRAM in Germany
 - Established SAP HR at OSRAM, Berlin
- 1995–1997 (16h/week)
 - Employed in the Overseas Sales department
 - Handled sales between OSRAM Germany and branches of OSRAM in South America

EDUCATION 2001-2004 Ludwig-Maximilians University Munich

Pb.D. in Computer Science

- Specializing in Database Systems and Knowledge Discovery
- Thesis title: “New Techniques for Clustering Complex Objects”
- Advisor: Dr. Hans-Peter Kriegel
- Completed with magna cum laude

1995-2001 Ludwig-Maximilians University Munich

Master of Computer Science (Minor: Psychology)

- Thesis title: ”Analysis and Design of a Software Solution for Positive Time Management in SAP R/3” (in German)
- Completed with distinction

1993-1995 OSRAM GmbH / Siemens AG Munich

In-firm training

- Four school terms at Siemens interleaved with practical terms at OSRAM GmbH (including a 2-month term onsite at OSRAM Sweden)

1984-1993 Schyren-Gymnasium Pfaffenhofen/Ilm

High School

- Specialized in languages (Latin, German, English, and French)

PUBLICATIONS Karin Kailing. “New Techniques for Clustering Complex Objects”. PhD thesis, Ludwig-Maximilians Universität München, Munich, Germany, 2004.

C. Baumgartner, K. Kailing, H.-P. Kriegel, P. Kröger, C. Plant. “Subspace Selection for Clustering High-Dimensional Data”. In Proc. of the 4th IEEE Int. Conf. on Data Mining (ICDM'04), Brighton, UK, 2004.

C. Böhm, K. Kailing, H.-P. Kriegel, P. Kröger. “Density Connected Clustering with Local Subspace Preferences”. In Proc. of the 4th IEEE Int. Conf. on Data Mining (ICDM'04), Brighton, UK, 2004.

K. Kailing, H.-P. Kriegel, M. Pfeifle, S. Schönauer. “Efficient Indexing of Complex Objects for Density-based Clustering”. In Fifth International Workshop on

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Multimedia Data Mining (MDM/KDD'04), Seattle, WA, 2004.

C. Böhm, K. Kailing, P. Kröger, Hans-Peter Kriegel: "Immer größere und komplexere Datenmengen: Herausforderungen für Clustering-Algorithmen". Datenbank-Spektrum, Volume 9, 2004, pp. 11-17.

K. Kailing, H.-P. Kriegel, S. Schönauer. "Content-Based Image Retrieval Using Multiple Representations". To appear in Proc. 8th Int. Conf. on Knowledge-Based Intelligent Information and Engineering Systems (KES'04), Wellington, New Zealand, 2004.

K. Kailing, H.-P. Kriegel, A. Pryakhin, M. Schubert. "Clustering Multi-Represented Objects with Noise". In Proc. 8th Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD'04), Sydney, Australia, pages 394–403, 2004.

C. Böhm, K. Kailing, P. Kröger, A. Zimek. "Computing Clusters of Correlation Connected Objects". In Proc. ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'04), Paris, France, pages 455–466, 2004.

K. Kailing, H.-P. Kriegel, P. Kröger. "Density-Connected Subspace Clustering for High-Dimensional Data". In Proc. SIAM Int. Conf. on Data Mining (SDM'04), Lake Buena Vista, FL, pages 246–257, 2004.

K. Kailing, H.-P. Kriegel, S. Schönauer, T. Seidl. "Efficient Similarity Search for Hierarchical Data in Large Databases". In Proc. 9th Int. Conf. on Extending Database Technology (EDBT 2004), Heraklion, Greece, pages 676–693, 2004.

K. Kailing, H.-P. Kriegel, S. Schönauer, T. Seidl. "Efficient Similarity Search in Large Databases of Tree Structured Objects (Poster)". In Proc. 20th Int. Conf. on Data Engineering (ICDE'04), Boston, MA, page 835, 2004.

K. Kailing, H.P. Kriegel, P. Kröger, S. Wanka. "Ranking Interesting Subspaces for Clustering High Dimensional Data". In 7th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD'03), Cavtat-Dubrovnik, Croatia, 2003.

INVITED TALKS

"Ranking Interesting Subspaces for Clustering High Dimensional Data" in "Colloquium on Machine Learning and Data Mining", Technical University of Munich in 2003

SERVICE

Reviewed papers for VLDB, SIGMOD, and SIGKDD conferences, KAIS, TKDE, TODS, and Journal of Universal Computer Science journals

Member of commission for appointment of assistant professorship at the Database and Information Systems Group of the Ludwig-Maximilians University

COMMUNITY EXPERIENCE

1991–to date Kreisjugendring Pfaffenhofen/Ilm

Organizing leisure-time activities for kids

- Organize and lead camps for kids between 11- and 13 years
- Organize and lead bike tours for youths between 14 and 16 years
- Organize and lead excursions to European cities for youths between 14 and 18 years