

Scientific Resume

Jan Arpe

CONTACT INFORMATION	Department of Statistics 367 Evans Hall #3860 University of California Berkeley, CA 94720-3860, USA	Phone: +1 510 642 2780 Fax: +1 510 642 7892 Email: arpe at stat.berkeley.edu Web: www.stat.berkeley.edu/~arpe
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RESEARCH INTERESTS	Computational Learning <ul style="list-style-type: none">◦ learning with much irrelevant information◦ learning in the presence of noise Fourier Analysis of Boolean Functions <ul style="list-style-type: none">◦ applications in learning theory◦ structural properties Approximation Algorithms <ul style="list-style-type: none">◦ grammar-based compression, circuit design◦ communication protocol design Algebraic Topology <ul style="list-style-type: none">◦ homology and homotopy theory◦ applications to theoretical computer science
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EDUCATION	Dr. rer. nat. (PhD) in Theoretical Computer Science, Univ. of Lübeck Thesis: <i>Learning Concepts with Few Unknown Relevant Attributes from Noisy Data</i> Referees: Prof. R. Reischuk, Prof. H. U. Simon, Prof. G. Schnitger, Prof. T. Zeugmann Total grade: <i>summa cum laude</i> 2006	
	Diploma in Mathematics (minor: Computer Science), LMU Munich Thesis: <i>Computation of secondary coefficient groups of the $SO(3) \times S^1$-equivariant mapping degree</i> , total grade: <i>very good</i> Focus of studies: theoretical computer science, algebraic topology, functional analysis 2002	
	Pre-diploma in Mathematics (minor: Computer Science), Univ. of Mainz 1998	

EMPLOYMENT	Postdoc visitor at the Dep. of Statistics, UC Berkeley DAAD research project <i>Discrete Fourier Analysis in Theoretical Computer Science</i> 2007 – present	
	Research associate at the Institute for TCS, University of Lübeck DFG research projects <i>Robust Inference and Compression</i> and <i>Precision Complexity</i> 2002 – 2007	
	Teaching assistant, Department of Mathematics, LMU Munich 2000 – 2001	
	Working student at Siemens (Inform. and Comm. Mobiles), Munich 2000	
	Teaching assistant, Department of Mathematics, Univ. of Mainz 1998 – 1999	

PUBLICATIONS	Electronic versions of all papers can be found at www.stat.berkeley.edu/~arpe 3 articles in refereed journals (Algorithmica, TCS, Theoret. Informatics Appl.), 6 articles in refereed conferences (e.g., COCOON, TAMC, DCC, ALT), 10 oral presentations at conferences and workshops, reviewer for 7 conferences (e.g., SODA, STACS, ALT)	
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TEACHING EXPERIENCE	Led graduate and undergraduate seminars and exercise sessions from 1998 to present Selected courses: Complexity Theory, Methodology of Science, Introduction to Theoretical Computer Science, Algorithmic Game Theory, Kolmogorov Complexity, Linear Algebra	
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LANGUAGE SKILLS	German <i>mother tongue</i> Italian <i>basic</i> English <i>fluent</i> Danish <i>basic</i> French <i>good</i>	
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MEMBERSHIPS	Deutsche Mathematiker-Vereinigung (DMV), German Mathematical Society Gesellschaft für Informatik e.V. (GI), German Society for Computer Science	
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