MichaelSchober

PhD student

contact

Wennfelder Garten 11
72072 Tübingen
Germany

+49 176 314 314 25
+49 7071 601 588

mschober@tue.mpg.de
twitter://mschoberml

languages

german mother tongue
english fluency
french basic knowledge

programming

Matlab, Python, C#,
Java, C, Haskell, SQL

education

12/2013–present **PhD** in machine learning Max Planck Institute for Intelligent Systems, Tübingen, Germany
Title: *Building a Probabilistic ODE Solver*. Supervisor: Philipp Hennig.

09/2007–11/2013 **Diplom (diploma)** in computer science Eberhard-Karls-Universität Tübingen, Germany
Diploma thesis: *Camera-specific Image Denoising*. Supervisor: Bernhard Schölkopf. Graded 1.3 on German university scale from 1.0 (best) to 4.0 (worst). Overall grade point average 1.1 on German university scale. [German five-year degree, roughly equivalent to MSc level.]

09/2010–05/2011 **Visiting graduate student** University of Maryland, College Park, USA
Study abroad program, supported by the *Baden-Württemberg-STIPENDIUM* scholarship

07/2010 **Vordiplom** in mathematics Eberhard-Karls-Universität Tübingen, Germany
Grade point average 1.6 on German university scale. [Two-year intermediate examination for the German diploma degree, roughly equivalent to BSc level.]

06/2005 **Abitur** (A-Levels) Robert-Bosch-Gymnasium, Wendlingen, Germany
Grade point average 1.9 on German school scale from 1.0 (best) to 6.0 (fail)

professional experience

07/2015–09/2015 **Internship** at **Microsoft Research** Cambridge, United Kingdom
Extending a probabilistic model for time-of-flight depth imaging

07/2011–09/2011 **Internship** at **Locom Software GmbH** Karlsruhe, Germany
Development of a freight matrix calculation component

10/2008–07/2010 **Research assistant** Eberhard-Karls-Universität Tübingen, Germany
Development of a linear programming API, *SCPSolver*

08/2008–09/2008 **Summer job** at **Bosch Rexroth AG** Horb, Germany
Development of a project planning system for an engineering department

10/2007–07/2008 **Teaching assistant** Eberhard-Karls-Universität Tübingen, Germany
Teaching assistant for the introductory computer science courses

publications

submitted preprints

A probabilistic model for the numerical solution of initial value problems
Schober, Michael, Simo Särkkä, and Philipp Hennig
arXiv preprint arXiv:1610.05261 (submitted). submitted

articles in peer-reviewed conference proceedings

Dynamic Time-of-Flight
Schober, Michael, Amit Adam, Omer Yair, Shai Mazor, and Sebastian Nowozin
2017 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017
accepted

A Random Riemannian Metric for Probabilistic Shortest-Path Tractography
Hauberg, Søren, Michael Schober, Matthew Liptrot, Philipp Hennig, and Aasa Feragen
Medical Image Computing and Computer Assisted Intervention – MICCAI 2015, 2015

Probabilistic ODE Solvers with Runge-Kutta Means
Schober, Michael, David K Duvenaud, and Philipp Hennig
Advances in Neural Information Processing Systems 27, 2014
Selected for oral presentation (top 1.2% of submissions)

Probabilistic shortest path tractography in DTI using Gaussian Process ODE solvers
Schober, Michael, Niklas Kasenburg, Aasa Feragen, Philipp Hennig, and Søren Hauberg
Medical Image Computing and Computer-Assisted Intervention – MICCAI 2014, 2014

Diploma and research thesis

"Camera-specific Image Denoising"
Schober, Michael
Eberhard-Karls-Universität Tübingen, MPI für Intelligente Systeme Tübingen, 2013

"Using label metrics for Distance Metric Learning"
Schober, Michael
Eberhard-Karls-Universität Tübingen, 2009

presentations

03/2017	Bosch Corporate Research Probabilistic Models of Numerical ODE Solvers and Their Applications	Renningen, Germany
04/2016	SIAM conference on Uncertainy Quantification Lightweight Error Estimation: Using the Probabilistic Interpretation of Classic Numerical Methods	Lausanne, Switzerland
06/2015	Numerical Analysis group Prof. Lubich A Probabilistic Approach to Solving Ordinary Differential Equations	Universität Tübingen, Germany

community

06/2016	**Co-organizer ICML workshop on Geometry in Machine Learning (Gimli)**	ICML, NY, USA
04/2016	**Organizer Probabilistic Numerics PhD student convention** Organized a scientific workshop for the PhD students of our community	MPI for Intelligent Systems, Tübingen
08/2013	**Co-organizer SAMPI student summer school** Co-organized a student summer school on machine learning for gifted high-school students	MPI for Intelligent Systems, Tübingen

awards

09/2014	**MICCAI conference travel award** Total value: $500.-	MICCAI society
09/2009	**Baden-Württemberg-STIPENDIUM** Travel award for abroad studies. Total value: €500.-	Baden-Württemberg Stiftung, Germany

interests

professional: probabilistic models, numerical methods
personal: running, hiking, choir, dancing