Jens Fischer

Birthday/ -place: November 20, 1992 Karlsruhe, Germany
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Homepage   https://jemathfischer.github.io/

Education

04.2016 - Present   **University of Potsdam**
Master of Science in Mathematics

Areas of interest: Agent based modeling, Dynamics of complex systems, Moral hazard scenarios, Stochastic population dynamics, (Multivariate) Hawkes processes and applications

Introductory Research Project in Mathematics:
On Stability and Simulation of Nonlinear Hawkes Processes

Research Project in Computer Sciences:
Segregation in Networks under Stochastic Dynamics

Attended lectures in Mathematics:
- Stochastic and Deterministic Dynamical Systems
- Partial Differential Equations
- Surfaces in Analysis, Geometry and Physics
- Diffusion: Analytical and Geometric Aspects
- Bayesian Inference and Data Assimilation
- Introduction to Systems Biology

Attended lectures in Physics & Computer Sciences:
- Nichtlineare Dynamik
- Statistische Physik und Thermodynamik
- Intelligente Datenanalyse
- Randomized Network Segregation

09.2017 - 01.2018
- Exchange semester within the framework of the Erasmus+ program at the Université Lille 1, Laboratoire Paul Painlevé
- Scholarship from Labex CEMPI: Laboratoire d'Excellence Centre Européen

Attended lectures:
- Processus stochastiques - Statistiques des processus
- Introduction aux EDP non linéaires
- Statistiques
- Outils informatique en proba-stat

10.2012 - 04.2016   **Karlsruhe Institute of Technology (KIT)**

Bachelor of Science in Mathematics, 3 years program
Grade: good (2.3)

Bachelor thesis:
"On the theorems of Paley-Wiener and Titchmarsh"
Grade: very good (1.3)
Supervisor: Prof. Dr. Roland Schnaubelt

Awards and Fellowships

08.2017 - 01.2018   **Labex CEMPI: Laboratoire d'Excellence Centre Européen**
                       Full Scholarship for a semester in Lille, France

10.2012 - Present   **e-fellows.net**
                       Member Scholarship

Oral Presentations

14/03/2019   at Workshop of the Collège Doctoral Franco-Allemand Toulouse-Potsdam
22/02/2019   at the research seminar *Algorithm Engineering*, Hasso Plattner Institute, Potsdam
may 2018   at the research seminar *Mathematical Modelling and Systems Biology*, Potsdam
19/04/2018   at the research seminar *Probability Theory*, Potsdam
02/05/2017   at the research seminar *Partial Differential Equations*, Potsdam
june 2017   at the research seminar *Graph Theory*, Potsdam

Participation at Conferences or Workshops

13/03/19 - 15/03/19   Workshop du Collège Doctoral Franco-Allemand Toulouse-Potsdam *Stochastic processes and statistical machine learning II,* Toulouse, Speaker
14/02/18 - 16/02/18   Workshop du Collège Doctoral Franco-Allemand Toulouse-Potsdam *Stochastic processes and statistical machine learning I,* Potsdam
03/2018 et 03/2019   at Spring School 2019 de SFB 1294 Data Assimilation, Potsdam, Germany
10/18   Effective Altruism Global: London 2018 at UCL, London, UK
07/18   ISUS 2018 Karlsruhe, *Utility, Progress and Technology*
              at KIT, Karlsruhe, Allemagne, Poster on "AI Safety", Contributor

Teaching

10.2016 - Present   **University of Potsdam**
                       Analysis I & II for Mathematics Bachelor of Science
                       Foundations of Stochastics for Master of Data Science
                       Tutorials and exercise classes
                       Preparation of exercise sheets

04.2014 - 03.2016   **Karlsruhe Institut for Technology (KIT)**
                       Mathematical Methods for Bachelor of Science in Computer Sciences
                       Tutorials and exercise classes

Programming Skills

Python (advanced), Scilab / Matlab (advanced)
- Simulation and Statistics for Hawkes Process
- Bayesian Data Assimilation
- Analysis of European Union Water Use data
  (cf. https://github.com/jeMATHfischer)

20.-22.04.18 Data Science for Social Good Berlin
Hackathon hosted by DSSG Berlin
Project: Time series analysis of donations;
Role: Data Analyst

25.-27.05.18 HackHPI 2018
Hackathon at the Hasso-Plattner Institute Potsdam
Project: Analysis and visualization of groundwater levels throughout the EU;
Role: Data Analyst

19.10.-21.10.18 d-fine Hackathon 2018
Hackathon hosted by d-fine GmbH
Project: Analysis of pollution levels in a german metropolis;
Role: Data Analyst

Language Skills

German (C2), English (C1), French (B2)

Extracurricular Activities

10.2016 - Present **Supporter of the Effective Altruism movement**
07.07.18 - 09.07.18, "Joy and suffering - What makes for sentience",
joint workshop with juFORUM e.V., Project Leader
02.18 - Present, Local Group Organizer
04.18 - 07.18, Seminar "Rationality and Empathy", Seminar Advisor
Starting 04.19, Seminar "Rationality and Empathy", Seminar Advisor
(accepted and funded by the University of Potsdam)

12.2013 - Present **Member of the scientific youth organization**
"Deutsches Jungforschernetzwerk – juFORUM e.V."
Organisation of regional and interregional events and workshops