Dagstuhl Seminar 25092
Estimation-of-Distribution Algorithms: Theory and Applications

Seminar schedule

Monday, 24 February 2025 – Lecture Hall Karlsruhe

07:30 – 09:00	Breakfast
09:00 – 09:15	Welcome and seminar opening
09:15 – 10:00	Participant introduction
10:00 – 10:30	Coffee break
10:30 – 11:30	Introductory talk: **Timo Kötzing** on *Introduction to Theoretical Analyses of EDAs*
11:30 – 12:00	Talk: **Martin Krejca** on *Multi-valued EDAs*
12:15 – 13:30	Lunch
14:00 – 15:00	Introductory talk: **John McCall** on *Applications of EDAs – Overview*
15:00 – 15:30	Talk: **Jose Ignacio Hidalgo** on *Data Augmentation and Imputation with Estimation of Distribution Algorithms*
15:30 – 16:00	Cake
16:00 – 17:00	Presentation of focus points for the seminar
17:00 – 17:10	Self-presentation by **Jasmin Brandt**
17:10 – 17:30	Talk: **Johannes Lengler** on *Faster Optimization Through Genetic Drift*
18:00 – 19:00	Dinner
19:00 – ∞	Individual discussions, cheese platter

Tuesday, 25 February 2025 – Lecture Hall Karlsruhe

07:30 – 09:00	Breakfast
09:00 – 09:05	Self-presentation by **Aishwarya Radhakrishnan**
09:05 – 09:10	Self-presentation by **Alistair Benford**
09:10 – 09:40	Talk: **Joshua Knowles** on *Is Deep Optimization an EDA?*
09:40 – 10:00	Organization of breakout groups
10:00 – 10:30	Coffee break
10:30 – 12:00	Breakout session 1
12:15 – 13:30	Lunch
14:00 – 14:15	Reports from the breakout groups
14:15 – 14:45	Talk: **Valentino Santucci** on *The Use of the Doubly Stochastic Matrix models for the Quadratic Assignment Problem*
14:45 – 15:15	Talk: **Marcus Schmidbauer** on *Linkage-Learning Evolutionary Algorithms: Recent Theoretical Advances*
15:15 – 15:30	Talk: **Carola Doerr** on *Searching Permutations or Constructing Uniformly Distributed Point Sets*
15:30 – 16:00	Cake
16:00 – 17:30	Breakout session 2
18:00 – 19:00	Dinner
19:00 – ∞	Individual discussions, cheese platter

Wednesday, 26 February 2025 – Lecture Hall Karlsruhe

07:30 – 09:00	Breakfast
09:00 – 09:20	Reports from breakout groups
09:20 – 09:40	Talk: **Vanessa Volz** on *Estimated Distributions and Warm Starts*
09:40 – 10:10	Talk: **Franz Rothlauf** on *Creating Probability Models via Deep Learning*
10:10 – 10:40	Coffee break
10:40 – 11:10	**Nikolaus Hansen** on *It's Always the Step Size*
11:10 – 11:35	**Duc-Cuong Dang** on *Sampling of Rare Fitness Values*
11:35 – 12.00	**Martin Fyvie** on *Search Trajectory Mining*
12:00 – 12:15	Group photo in front of Dagstuhl chapel
12:15 – 13:30	Lunch
13:30 – 15:30	Hike
15:30 – 16:00	Cake
16:00 – 18:00	Time for individual discussions
18:00 – 19:00	Dinner
19:00 – ∞	Individual discussions, cheese platter

Thursday, 27 February 2025 – Lecture Hall Karlsruhe

07:30 – 09:00	Breakfast
09:00 – 09:30	**Roberto Santana** on *From Fitness Landscapes to Problem Factorizations: A Machine Learning Perspective*
09:30 – 10:00	**Jon Shapiro** on *Estimation of Distribution Algorithms and the Ising Model*
10:00 – 10:30	Coffee break
10:30 – 12:00	Breakout sessions
12:15 – 13:30	Lunch
14:00 – 14:30	**Dirk Thierens** on *Optimal Mixing in Model-based Evolutionary Algorithms*
14:30 – 15:30	Discussion forum: early insights on design and analysis of EDAs
15:30 – 16:00	Cake
16:00 – 17:30	Breakout sessions
18:00 – 19:00	Dinner
19:00 – ∞	Individual discussions, cheese platter

Friday, 28 February 2025 – Lecture Hall Karlsruhe

07:30 – 09:00	Breakfast
	Please leave your room by 9am and pay before lunch.
09:15 – 09:45	**Carsten Witt** on *Runtime Analysis of the Multi-valued cGA*
09:45 – 10:00	**Marta Ortiz** on *Copula-Vines Models on EDAs*
10:00 – 10:15	**Josu Ceberio** on *An alternative representation for permutations: Inversion Vectors*
10:15 – 10:45	Coffee break
10:45 – 12:00	Feedback session
12:15 – 13:00	Lunch