COSEAL Workshop 2025

Agenda for Monday, May 5, 2025

Start	End	Session	Speaker
09:00	09:30	**Opening Session**	
09:00	09:30	General Instructions and Welcome Message	Vitor Cerqueira
09:30	10:30	**Talks**	
09:30	10:00	Reducing Algorithm Configuration Spaces	Pavel Brazdil
10:00	10:30	Overfitting in Combined Algorithm Selection and Hyperparameter Optimization	Mitra Baratchi
10:30	11:00	**Coffee Break**	
11:00	12:30	**Poster Session**	
		Automatic Algorithm Configuration under Streaming Problem Instances	Margherita Battistotti
		TBA	Leona Hennig
		Strong Priors for Freeze-Thaw Prior Fitted Networks	Tim Ruhkopf
		Acquisition Function Optimization in Bayesian Optimization	Carolin Benjamins, Matthias Feurer
		Downsampling Time Series for Neuromuscular Disease Classification	Mathieu Cherpitel
		Deep ELA for Mixed-Integer and Mixed-Variable Optimization Problems	Moritz Seiler
12:30	13:30	**Lunch Break (on your own)**	

13:30	15:00	Talks	
13:30	14:00	Uncertainty in Algorithm Selection	Pascal Kerschke
14:00	14:15	The Pitfalls of Benchmarking in Algorithm Selection: What We Are Getting Wrong	Gašper Petelin
14:15	14:30	On the Importance of Reward Design in Reinforcement Learning-based Dynamic Algorithm Configuration	Tai Nguyen
14:30	14:45	Landscape Features in Single-Objective Continuous Optimization: Have We Hit a Wall in Algorithm Selection Generalization?	Gjorgjina Cenikj
14:45	15:15	Is few-shot meta-learning safe?	Henry Gouk
15:15	15:45	Coffee Break	
15:45	17:00	Poster Session	
		On the Importance of Reward Design in Reinforcement Learning-based Dynamic Algorithm Configuration	Tai Nguyen
		LLMs for Interactive AutoML	Lukas Fehring
		Data Efficient Pre-training for Language Models: An Empirical Study of Compute Efficiency and Linguistic Competence	Andreas Paraskeva
		DCMatch - Identify Matching Architectures in Deep Clustering through Meta-Learning	Mamdouh Aljoud
		Controlling the Mutation in Large Language Models for the Efficient Evolution of Algorithms	Haoran Yin
		A set of scalable optimization benchmarks inspired from crashworthiness simulations	Ivan Olarte Rodriguez
17:00	17:05	Closing Session	
		Announcements	

COSEAL Workshop 2025

Agenda for Tuesday, May 6, 2025

09:00	10:30	**Talks**	
09:00	09:30	Code Evolution Graphs: Understanding Large Language Model Driven Design of Algorithms	Lars Kotthoff
09:30	09:45	AutoML to advance Earth Observation (literature survey)	Julia Wąsala
09:45	10:00	Constructing ε-manifolds of potential solutions for noisy model inversion	Laurens Arp
10:00	10:30	Global Benchmark Database	Markus Iser
10:30	11:00	**Coffee Break**	
11:00	12:30	**Poster Session**	
		Global Benchmark Database	Markus Iser
		Constructing ε-manifolds of potential solutions for noisy model inversion	Laurens Arp
		AutoML to advance Earth Observation (literature survey)	Julia Wąsala
		Efficient Online Automated Algorithm Selection in the Face of Drifting Optimisation Problem Instances	Quentin Renau
		Meta-Learning framework for Healthcare datasets	Muhammad Asad
		Hybridizing Target- and SHAP-encoded Features for Algorithm Selection in Mixed-variable Black-Box Optimization	Konstantin Dietrich
12:30	13:30	**Lunch Break (on your own)**	

13:30	14:40	Talks	
13:30	14:00	Solve it with EASE: Effortless Algorithmic Solution Evolution	Roman Šenkeřík
14:00	14:20	Sparkle: Toward Accessible Meta-Algorithmics	Thijs Snelleman, Jeroen Rook
14:20	14:40	Synthetic data generation: architecture insights and application in robustness evaluation	Moisés Santos, Anibal Silva, Antónia Brito
14:40	15:00	Workshop & Breakout Session	
15:00	15:30	Coffee Break	
15:30	17:00	Poster Session	
		Tabular dataset similarity modeling using graph neural networks	Antoni Zajko
		Can clustering improve the performance of classifiers? Introduction of a new ensemble technique utilizing cluster analysis methods in classification tasks.	Jakub Piwko, Jędrzej Ruciński, Dawid Płudowski, Antoni Zajko, Franciszek Filipek, Anna Kozak, Katarzyna Woźnica, Mateusz Zacharecki, Patrycja Żak
		CASHomon Sets: Efficient Rashomon Sets Across Multiple Model Classes and their Hyperparameters	Matthias Feurer
		Algorithm selection framework (ASF)	Hadar Shavit
		Portfolio Learning for Energy Aware AutoML	Nick Kocher
		Exploring Problem-Specific Module Interactions in Modular CMA-ES	Ana Nikolikj
		Solve it with EASE: Effortless Algorithmic Solution Evolution	Roman Šenkeřík
17:00	19:00	Break (on your own)	
19:00	22:00	Workshop Dinner	

COSEAL Workshop 2025

Agenda for Wednesday, May 7, 2025

09:15	10:30	Talks	
09:15	09:30	carps: A Framework for Comparing N Hyperparameter Optimizers on M Benchmarks	Carolin Benjamins
09:30	10:00	Automated data preparation for machine learning	Sasa Mladenovic
10:00	10:30	AUTOML for Algorithms that learn from data streams	João Gama
10:30	11:00	Coffee Break	
11:00	12:30	Poster Session	
		carps: A Framework for Comparing N Hyperparameter Optimizers on M Benchmarks	Carolin Benjamins
		Automated data preparation for machine learning	Sasa Mladenovic
		R2 v2: The Pareto-compliant R2 Indicator for Better Benchmarking in Bi-objective Optimization	Lennart Schäpermeier
		Instance selection methods in automated algorithm configuration	Marie Anastacio
		Deep reinforcement learning for instance-specific algorithm configuration	Elias Schede
		Instance Space Analysis for Reinforcement Learning	Catarina Monteiro
		Metalearning for Enhanced Algorithm Selection in Time Series Decomposition-Based Forecasting	José Araújo
		tsMorph: model auditing for time series forecasting	Moises Santos

12:30	13:00	Closing Session	
		Announcements	
		Closing	Carlos Soares