

Workshop on Automated Algorithm Design (TTIC 2019)

<http://www.cs.cmu.edu/~ckingsf/AutoAlg2019/>

Wednesday, August 7, 2109

9:30-10:00 **Breakfast** (catered at TTIC)

10:00-12:00 **Talk session 1** (40 minute talks)

10:00 Kevin Leyton-Brown - Heuristic Approaches to Algorithm Configuration: SMAC and Beyond

10:40 Alexei Novikov - The Noise Collector for sparse recovery in high dimensions

11:20 Brendan Lucier - Procrastinating with Confidence: Near-Optimal, Anytime, Adaptive Algorithm Configuration

12:00-1:30 **Lunch** (catered at TTIC)

1:30-3:00 **Talk session 2** (40 minute talks)

1:30 Csaba Szepesvari - Learning near-optimal hyperparameters with minimal overhead

2:10 Vincent Conitzer - New Directions in Automated Mechanism Design

2:50-3:30 **Break + tea**

3:30-4:00 **Talk session 3** (40 minute talks)

3:30 Dan DeBlasio - Building an automated bioinformatician: More accurate transcript assembly using parameter advising

4:10 Paul Medvedev - Estimating the k-mer size parameter for genome assembly

4:50 Carl Kingsford - Learning network models automatically

5:30-6:30 **Break**

6:30 *Optional group dinner at a nearby restaurant; depart TTIC at 6:30pm*

Thursday, August 8, 2019

9:30-10:00 **Breakfast** (catered at TTIC)

10:00-12:00 **Talk session 4** (40 minute talks)

10:00 Tim Rougharden - Data-Driven Optimal Auction Theory

10:40 Nina Balcan - Data-Driven Algorithm Selection

11:20 Ellen Vitercik - Sample complexity of algorithm configuration for sequence alignment

12:00-1:30 **Lunch (catered at TTIC)**

1:30-3:00 **Talk session 5** (40 minute talks)

1:30 Tuomas Sandholm: Learning to Solve MIPs Faster: From Practice to Theory

2:10 Bistra Dilkina

2:50-3:30 **Break + tea**

3:30-4:00 **Talk session 6** (40 minute talks)

3:30 Avrim Blum

4:10 Maxime Gasse - Learning to branch in MILP solvers

4:50-5:15 **Break**

5:15-6:30 **Open Questions**

6:45 *Optional group dinner at a nearby restaurant; depart TTIC at 6:45pm*

Friday, August 9, 2019

9:30-10:00 **Breakfast** (catered at TTIC)

10:00-12:00 **Talk session 7** (40 minute talks)

10:00 Le Song - GLAD: Learning Sparse Graph Recovery

10:40 Yisong Yue - Learning to Optimize as Policy Learning

11:20 Charles Sutton

12:00-1:30 **Lunch (catered at TTIC)**

1:30-3:00 **Talk session 8** (40 minute talks)

1:30 Piotr Indyk

2:10 Elias Khalil

2:50 **Closing**

3:00-3:30 **Tea**

3:30 **End**