

Workshop Deep Learning

What is Deep Learning and where in the (Chemical) Process Industry can it be applied?

- ➔ Date: Monday 02.03.2020
- ➔ Time: 9:00 – 16:00
- ➔ Where: G2 ZE15 – Emil-Figge-Str. 70 – TU Dortmund
- ➔ What: Talks and discussions in a relaxed atmosphere. Ideas, early and in-progress work is encouraged



Agenda 1/2 – Pre-Lunch

- 9:15 – 10:00
Guest Fabian Bürger • What is Deep Learning and its application to autonomous driving
- 10:00 – 10:30
Matthias Rodeck • Characterization of sprays by image recognition with neural networks
- 10:30 – 10:45 **Coffee break**
- 10:45 – 11:30
Janine Lins • Particle characterization during crystallization using CNNs
- 11:30 – 12:00
Guest Corina Nentwich • When data is expensive: Adaptive Sampling for the training of surrogate models
- 12:00 – 13:00 **Lunch break**

Agenda 2/2 – After-Lunch

- 13:00 – 13:45
Guest Fabian Bürger • How to apply deep learning to other fields than image recognition
- 13:45 – 14:30
Tim Janus • Surrogate-assisted flowsheet optimization for steady state models
- 14:30 – 14:45 **Coffee break**
- 14:45 – 15:15
Kai Kruber • Optimize intensified distillation columns with machine learning methods
- 15:15 – 15:45
Pourya Azadi • Save energy in a furnace by the application of neural networks
- 15:45 – 16:00 **Final discussion**

- 18:30 – open end **Grab a beer in Dortmund City**



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