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**