

Invited Talk

KEMAI Research Training Group GRK 3012/1



Prof. Veronika Cheplygina PhD,
IT University of Copenhagen

Curious findings about medical image datasets

Abstract. It may seem intuitive that we need high quality datasets to ensure for robust algorithms for medical image classification. With the introduction of openly available, larger datasets, it might seem that the problem has been solved. However, this is far from being the case, as it turns out that even these datasets suffer from issues like label noise and shortcuts or confounders. Furthermore, there are behaviours in our research community that threaten the validity of published findings. In this talk I will discuss both types of issues with examples from recent papers.

Relevant papers

<https://arxiv.org/pdf/2402.06353>

<https://arxiv.org/pdf/2402.03003>

<https://arxiv.org/pdf/2309.02244>

<https://www.nature.com/articles/s41746-022-00592-y>

Speaker Bio. Dr. Veronika Cheplygina's research focuses on meta-research in the fields of machine learning and medical image analysis. She received her Ph.D. from Delft University of Technology in 2015. After a postdoc at the Erasmus Medical Center, in 2017 she started as an assistant professor at Eindhoven University of Technology. In 2020, failing to achieve various metrics, she left the tenure track of search of the next step where she can contribute to open and inclusive science. In 2021 she started as an associate professor at IT University of Copenhagen, and was recently appointed as full professor at the same university. Next to research and teaching, Veronika blogs about academic life at <https://www.veronikach.com>. She also loves cats, which you will often encounter in her work.

Time & Place.

Wednesday, July 23, 2025

13:45 – 14:30

Reisensburg Castle