Machine learning in imaging

Symposium of the Microscopy Imaging Center

Date
Friday November 29, 2019, 9:30 – 17:00

Location
University of Bern, UniS, lecture hall A003, Schanzeneckstrasse 1, 3012 Bern

Scientific committee
Inti Zlobec, Guillaume Witz, Raphael Sznitman, Mauricio Reyes

Approved for 0.5 day credit for continued animal experimentation in the Canton of Bern

09:30 Welcome coffee and registration
10:30 Welcome: Hans-Uwe Simon, Dean of the Medical Faculty
David Spreng, Dean of the Vetsuisse Faculty
Britta Engelhardt, President of the MIC

Session 1. Chairs: Inti Zlobec, Raphael Sznitman
10:35 Machine learning at the University of Bern
An overview presented by the scientific committee

10:45 Jean-Philippe Thiran
EPFL, Lausanne, CH
Keynote: Inverse problems in ultrasound imaging: Efficient modeling, sparse regularization and neural networks

11:30 Anna Kreshuk
EMBL, Heidelberg, DE
Image segmentation at scale

12:00 Michael Schell
Cenibra GmbH, DE
Teacher or student? How to teach AI to pick correct confocal microscopy images

12:15 Lunch and industry exhibition

Session 2. Chairs: Guillaume Witz, Mauricio Reyes
13:45 Inti Zlobec
University of Bern, CH
Digital pathology in translational research

14:15 Andrew Janowczyk
Lausanne Univ. Hospital, CH
Computational pathology: Towards precision medicine

14:45 Gergely Kovach
Sysmex Suisse AG, CH
High resolution whole tissue imaging for 3D analysis

15:00 Coffee and industry exhibition

Session 3. Chairs: Mauricio Reyes, Raphael Sznitman
15:30 David Pointu
GE Healthcare AG, CH
Advantages of IN Carta Phenoglyphs™ HCA machine learning module

15:45 Ender Konukoglu
ETH Zürich, CH
On Bayesian models with networks for reconstruction and detection

16:15 Christine Decaestecker
University of Brussels, BE
Segmentation of histopathological images: How to reduce the supervision needs for deep learning

16:45 Conclusions and farewell

Supported by

Registration
http://www.mic.unibe.ch/symposium_registration.php

Organized by
Microscopy Imaging Center
University of Bern
Faculty of Medicine
Faculty of Science
Vetsuisse Faculty