



Human Brain Project
Education Programme

2ND HBP CURRICULUM WORKSHOP SERIES

NEUROSCIENCE FOR ICT: APPLICATIONS TO COMPUTATION AND ROBOTICS

5-6 JULY 2018
KALKSCHEUNE BERLIN, GERMANY

SCIENTIFIC PROGRAMME



@hbp_education



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HBP Education



HBP Education Programme



<https://education.humanbrainproject.eu/>

HBP CURRICULUM

The HBP Curriculum on Interdisciplinary Brain Science combines web-based distance learning courses and face-to-face workshops that provide basic lessons in the HBP core fields neuroscience, medicine and ICT as well as the complementary subjects of ethics and intellectual property rights.

Further information:

<https://bit.ly/HBPCurriculum>

NEUROSCIENCE FOR ICT: APPLICATIONS TO COMPUTATION AND ROBOTICS

“Neuroscience for ICT: Applications to Computation and Robotics” is an interdisciplinary workshop aimed at giving an insight into Information and Communications Technology (ICT) to non-specialists. In particular, the workshop will provide the attendants with an understanding of the field of computational neuroscience and robotics.

The first day will provide the participants with a general overview of the HBP Research Infrastructure, followed by lectures on computational neuroscience where the participants gain a better understanding of the interaction between neuroscience and computation. The last session will focus on data management from a computational perspective.

During the morning session of the second day, we will provide talks from expert scientists in robotics and bio-inspired robotics. In the afternoon session, we intend to bridge the gap between computational technologies and neuroscience by providing a hands-on experience with the HBP Neurorobotics Platform (NRP).

Scientific Chair:

Alois Knoll | TUM

Technical
University
of Munich



Organisers:

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Contact:

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THURSDAY 5 JULY 2018

09:00 - 09:30	Registration
09:30 - 10:00	Welcome and introduction Cristina Iobbi TUM
10:00 - 10:30	Coffee break
10:30 - 12:00	Introduction to the HBP Research Infrastructure Giuseppe Fiameni CINECA
12:00 - 13:00	Lunch break
13:00 - 14:00	Bridging the gaps: Computation and neuroscience - neuroscience and computation I Egidio D'Angelo UNIPV
14:00 - 15:00	Bridging the gaps: Computation and neuroscience - neuroscience and computation II Carmen Lupascu CNR
15:00 - 15:30	Coffee break
15:30 - 17:00	Data generation from a computational perspective Anna Lührs JUELICH
17:00 - 18:00	Data use and ethical issues in HBP Manuel Guerrero KI
18:00 - 20:00	Poster session

FRIDAY 6 JULY 2018

- 09:00 - 10:00** **Bio-inspired control architecture for mobile robotics**
Yannick Morel | TUM
- 10:00 - 10:30** **Coffee break**
- 10:30 - 11:30** **tbd**
tbd
- 11:30 - 12:15** **Neuroscience and robotics II**
Tata Ramalingasetty Shravan | EPFL
- 12:15 - 13:00** **Lunch break**
- 13:00 - 14:00** **Introduction to neurorobotics and the NRP**
Fabrice Morin | TUM
- 14:00 - 16:00** **Demo experiment**
Mahmoud Akl | TUM

NOTES





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