This year we are organizing the 4th Data Science Summer School to continue the lively exchange, sharing and discovery of the latest advances in the field, with internationally renowned professors and experts of the area.

The summer school will take place from June 29th to July 3rd 2020 at École polytechnique (Palaiseau). It will include courses, parallel sessions, tutorials, exhibitions, poster sessions and networking cocktails.

The event provides a unique opportunity for the participants from the academic and industrial worlds to share their expertise, the latest challenges and possible solutions in data science. The various networking facilities enable the participants to meet the sponsors, discuss their work and interests, and launch collaborations.

The exhibition area will be set up during the first three days in the Grand Hall near the main amphitheater. The number of exhibition booths will be limited to 10.
THE EVENT

Fees

MSc2, PhD students and PostDoc: 150 €
Academics: 250 €
Professionals: 1 500 €

The registration fee includes courses, talks, special and poster sessions (the latter comes with an appetizer), coffee breaks, lunch, welcoming cocktail, banquet, and a shuttle bus option at the beginning and at the end of every day between Massy/Paris and the Polytechnique campus.

Statistics from 2019

500 participants
307 students (MSc, PhD) & postdocs, 105 professionals
35 experts (speakers, guests)
13 in-depth tutorials
34 countries of 6 continents
70 companies
220 institutions
13 practical sessions
152 posters
28% of women’s participation
OPENING

The first day morning will be public - between 800 to 1000 people are expected (including polytechnicians):

Talks by
• Michael JORDAN (University of California, Berkeley)
• TBA - 1-hour talk

The rest of the summer school is reserved for registered people.

DAY 1, 2 & 3

5 long tutorials
• Florence D’ALCHÉ-BUC (Télécom Paris)
• Gabriel PEYRÉ (CNRS, ENS)

2 parallel sessions on « Data Science for Climate » and « Natural Language Processing »
• Philippe NAVEAU (LSCE, CNRS) - « How to Attribute Extreme Events in Climate Studies »
• Claire MONTELEONI (University of Colorado Boulder)
• François YVON (LIMSI/CNRS)

1 round table
• Laurence DEVILLERS (Sorbonne Université, CNRS)
• Antonio CASILLI (Télécom Paris)
• Emmanuel BACRY (CNRS, Université Paris-Dauphine)

Poster session of participants
Selected by the organizing committee.

Exhibition / booths will be located near the lunch and coffee break area during the first 3 days.
DAY 4 & 5

13 in-depth tutorials with practical sessions

- Optimization
  - Alexandre GRAMFORT (Inria)
  - Aymeric DIEULEVEUT (École polytechnique)
  - Eric MOULINES (École polytechnique)
- Approximate Bayesian inference
- Topological data analysis
  - Pawel DLOTKO (Dioscuri Centre on TDA, Polish Academy of Sciences)
  - Vitaliy KURLIN (University of Liverpool)
  - Krasen SAMARDZHIEV (University of Liverpool)
  - Vincent ROUVREAU (Inria)
- Theory and applications of submodular optimization: from discrete to continuous and back
  - Hamed HASSANI (University of Pennsylvania)
- Machine learning with kernel methods: from basics to modern applications
  - Dougal SUTHERLAND (University of British Columbia)
- Robotics and control
  - Melanie ZEILINGER (ETH Zürich, University of Freiburg)
  - Lukas HEWING (ETH Zürich)
- Natural language processing
  - François YVON (LIMSI/CNRS)
- Generative models
- Deep learning
  - Olivier GRISEL (Inria)
- Reinforcement learning
  - Bilal PIOT (Google DeepMind)
  - Diana BORSA (Google DeepMind)
  - Pierre Harvey RICHEMOND (Imperial College London)
- Causality
- Recommendation system
  - Flavian VASILE (Criteo)
- Climate extremes
SPONSORING OFFER

**SILVER: 2 500 €**
- Donation
- Your logo on the communication tools (invitation, website, on-site signage...)

**GOLD: 5 000 €**
- Donation
- Your logo on the communication tools (invitation, website, on-site signage...)
- Chance to give a short speech during the cocktail on day 1

**PLATINUM: 10 000 €**
- Sponsoring
- Your logo on the communication tools (invitation, website, on-site signage...)
- Chance to give a short speech on day 1
- One booth space on the exhibition (3mx2m) including a high stool, a welcome desk, and two-sided walls

**DIAMOND: 15 000 €**
- Sponsoring
- Two invitations
- Your logo on the communication tools (invitation, website, on-site signage...)
- Chance to give a short speech on day 1
- One booth space on the exhibition (6mx3m) including a carpet, a high stool, a welcome desk, and two-sided walls
SPONSORING OFFER

WELCOME BAG: 2 500 €
- Donation: your logo on the welcome bags distributed to all the participants

USB KEYS: 2 500 €
- Donation: your logo on the USB keys distributed to all the participants

RECRUITMENT SESSION: 10 000 €
- Sponsoring: your logo on the communication tools
- One meeting room for 40 people booked for two hours at the end of one day
- One invitation
- Advertisement on the DS3 website (the management of the registration and the logistical needs - catering, for example - are not included)