# SOPH**I.A**

## SPRINGBOARD FOR ARTIFICIAL INTELLIGENCE

EDITION 2019

**19-23**
**NOVEMBER 2019**

**« AI WEEK » PROGRAM**

BEACHCOMBER
FRENCH RIVIERA

# SOPHI.A SUMMIT 2019

## AI WEEK
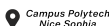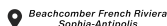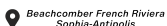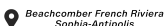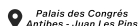
The second edition of **SophI.A Summit**,
Springboard for Artificial Intelligence,
will take place in **Sophia Antipolis**
from **November 19-23, 2019.**

**To mark the 50th anniversary of the technopole &
the launch of the "3IA Côte d'Azur",
this year's format evolves into**
**"THE AI WEEK"**
gathering key industrial, academic &
institutional stakeholders specialized in AI.

A total of **four events** will be held during the week,
including the Summit flagship:

## SOPHI.A SUMMIT 2019 - AI WEEK

| SIDE EVENTS | | SOPHIA SUMMIT | | | PUBLIC AI CONFERENCE |
|---|---|---|---|---|---|
| **TUESDAY, 19th NOVEMBER** | | **WEDNESDAY, 20th NOVEMBER** | **THURSDAY, 21st NOVEMBER** | **FRIDAY, 22th NOVEMBER** | **SATURDAY, 23th NOVEMBER** |
| Campus Polytech Nice Sophia | SophiaTech Espace Entreprises | Beachcomber French Riviera Sophia-Antipolis | Beachcomber French Riviera Sophia-Antipolis | Beachcomber French Riviera Sophia-Antipolis | Palais des Congrès Antibes - Juan Les Pins |

**AI MASTER CLASSES**
*ORGANIZED BY TELECOM VALLEY & PARTNERS*
8:30AM ~ 5:00PM
Free Entry

**AI EDUCATION FORUM**
*ORGANIZED BY UCA & PARTNERS*
10:00AM ~ 4:00PM
Free Entry

**OPENING CEREMONY**
10:00AM ~ 12:30AM

**AI & HEALTH**
2:00PM ~ 5:00PM

*ROUND TABLE*
**AI & ETHICS**
5:15PM ~ 6:45PM

**SOCIAL EVENT**
7:00PM ~ 9:00PM
3-Day Pass Only

**AI FUNDAMENTALS**
8:30AM ~ 12:00PM

**AI & SMART TERRITORIES & INFRASTRUCTURES**
2:00PM ~ 5:15PM

*ROUND TABLE*
**IMPACT OF AI ON ENTERPRISES**
5:30PM ~ 7:00PM
3-Day Pass Only

**AI & HEALTH**
8:30AM ~ 10:45PM

**CLOSING CEREMONY**
11:00AM ~ 1:00PM
3-Day Pass Only

**PUBLIC TALK BY LUC JULIA**
*Author of «AI Doesn't Exist» & Co-inventor of SIRI*
4:00PM ~ 6:30PM
Free Entry

## SOPHI.A
SPRINGBOARD FOR ARTIFICIAL INTELLIGENCE

Wed. November 20th

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AI & HEALTH

AI & ETHICS

# Wed. November 20th

| Time | | |
|---|---|---|
| 9:30AM | *Welcome Breakfast* | |
| 10AM | **OPENING CEREMONY**<br>**Keynote Speaker : Marco Gori**<br>**Professor of Computer Science, University of Siena** | |
| 12:30PM | *Lunch* | |
| | **AI & HEALTH** | |
| 2PM | **Plenary Session: Emmanuel Bacry**<br>**Health Data Hub** | |
| 2:40PM | **Plenary Session: Michael Tangermann**<br>**Freiburg University, Dept. of Computer Science** | |
| 3:20PM | *Break* | |
| | **Parallel Sessions**<br>**Chair H. Delingette**<br>*Grand Chelem Room* | **Parallel Sessions**<br>**Chair O. Humbert**<br>*Coaches Room* |
| 3:30PM | Mining Natural Language Arguments on Clinical Trials<br>S. Villata, I3S | LightHouse: An AI-Based Solution for the Blind & Visually Impaired<br>O. Bara, Scalian |
| 3:50PM | AI & Biophysics for Computational Cardiology: Learning by Heart<br>M. Sermesant, INRIA | PredictMed: Using AI for Medical Prediction in Neurology<br>C.M. Bertoncelli, Lenval Hospital |
| 4:10PM | Box-constrained Minimax Classifier for Personalized Medicine<br>L. Fillatre, I3S | AI in Abdominal Aortic Aneurysm<br>J. Raffort, CHU Nice |
| 4:30PM | A Statistical Classification Approach to Differentiate Bipolar Disorder & Major Depressive Disorder<br>S. Barbosa, IPCM | AI to Design Odorants Targeting Emotion & Motivation<br>D. Renaud, CHU Nice |
| 5PM | *Break* | |
| | **AI & ETHICS**<br>**ROUND TABLE** | |
| 5:15PM –<br>6:45PM | **Keynote Speaker: Lyse Langlois, Laval University & International Observatory on Societal Impacts of AI & the Digital Technology**<br><br>L. Godefroy, M. Teller - Université Côte d'Azur,<br>G. Lewkowicz - Université Libre de Bruxelles, S. Cheran, HPE,<br>K. Benyekhlef, Université de Montréal | |
| 7PM –<br>9PM | **SOCIAL EVENT**<br>*Beachcomber Hotel Lounge* | |

Thu. November 21st

AI FUNDAMENTALS

AI, SMART TERRITORIES &
INFRASTRUCTURES

IMPACT OF AI ON ENTERPRISES

# Thu. November 21st

## AI FUNDAMENTALS

| | | |
|---|---|---|
| **9AM** | **Plenary Session: Frank Nielsen** <br> **Teacher-Researcher, Polytechnique** | |
| **9:45AM** | *Break* | |
| | **Parallel Sessions** <br> **Chair F. Laviolette** <br> *Grand Chelem Room* | **Parallel Sessions** <br> **Chair F. Precioso** <br> *Coaches Room* |
| **10AM** | Monitoring Cyberbullying through Message Classification & Social Network Analysis <br> E. Cabrio, Université Côte d'Azur | When the Reasoning Power of Human Beings Meets the Computing Power of the Machine <br> J.C. Régin, UCA & 3IA |
| **10:20AM** | Optimal Transport & AI: Learning with the Least Effort <br> R. Flamary, UCA & 3IA | Machine Learning Meets Security <br> M. Bezzi, SAP |
| **10:40AM** | Theoretical Foundations for Interpretability in AI: the LIME case <br> D. Garreau, UCA | Reinforcement Learning for Navigation in Dynamic Environments <br> A. Celani, ICTP |
| **11AM** | A Deep Text Based Recommender System <br> M. Corneli, UCA | Explainable AI Based on the Feature Contribution <br> S. Grah, Thales |
| **11:20AM** | *Break* | |
| **11:30AM** | A Stochastic Blockmodel for Interaction Lengths in a Dynamic Network <br> R. Rastelli, UCD Ireland | Spherical Convolutional Neural Network for Fiber Orientation Distribution Function & Micro-Structure Parameter Estimation from Diffusion MRI <br> S. Sedlar, INRIA |
| **11:50AM** | Expert in the Loop: Human-Machine Interaction to Build Safe AI-Based Systems in Healthcare <br> M. Zuluaga, Eurecom | The Role of Network Topology for Distributed Machine Learning <br> G. Neglia, INRIA |
| **12:10PM** | Missing Data Meets Deep Learning <br> P.A. Mattei, INRIA | Amadeus & IBM |
| **12:30PM** | *Lunch & Exhibition* | |

# Thu. November 21st

| | AI, SMART TERRITORIES & INFRASTRUCTURES | |
|---|---|---|
| 2PM | **Plenary Session: Niloy Mitra,**<br>University College London, Dept. of Computer Science | |
| 2:40PM | **Plenary Session: Claude Le Pape**<br>Schneider Electric, VP Technology Portfolio & Partnerships -<br>Optimization and Analytics Domain Leader | |
| 3:20PM | *Break* | |
| | **Parallel Sessions**<br>**Chair P. Alliez**<br>*Grand Chelem Room* | **Parallel Sessions**<br>**Chair N. Maïzi**<br>*Coaches Room* |
| 3:30PM | Mobile AI:<br>Challenges & Opportunities<br>M. Debbah, Huawei | Towards Energy Behavior Change<br>in Smart Buildings Using AI<br>R. Akkouche, S. Selosse, G.<br>Guerassimoff, Mines ParisTech |
| 3:50PM | AI for Embedded,<br>AI Challenges & Solutions<br>F. Piry, ARM | Machine Learning Methods to Assist<br>Multi-energy Systems Optimization<br>in a Smart Grid<br>D. Bousnina, G. Guerassimoff,<br>Mines ParisTech |
| 4:10PM | Using Scenarios to Explore AI<br>Implications for<br>Infrastructures & Territories<br>J. Hoffmann, SKEMA | How AI Can Improve<br>the Traveler Experience<br>R.A. Agost, Amadeus |
| 4:30PM | Using AI to Optimize Industrial &<br>IT Prescriptive<br>Maintenance Operations<br>P. Baudelle, HPE | Automatic & Robust Chain for Urban<br>Reconstruction from Satellite Imagery<br>Y. Tarabalka, Luxarta |
| 4:50PM | Making AI Happen:<br>How to Successfully Implement<br>AI Transformations<br>C. Bataller, Accenture | From Satellite Images<br>to Digitized Representation<br>O. Tasar, INRIA |
| 5:15PM | *Break* | |
| 5:30PM -<br>7PM | **IMPACT OF AI ON ENTERPRISES**<br>**ROUND TABLE** | |
| | **E. Viale - Accenture, G. Floyrac - Amadeus,**<br>**F. Farzaneh - IPAG, P. Masse - HPE, B. Sinclair-Desgagne - SKEMA** | |

SOPH.IA
SPRINGBOARD FOR ARTIFICIAL INTELLIGENCE

Fri. November 22nd

AI & HEALTH

# Fri. November 22nd

| | **AI & HEALTH** |
|---|---|
| 8:30AM | **Plenary Session: Benoît Lamarche**<br>**Laval University, Quebec, Faculty of Agriculture & Food Sciences** |
| 9:15AM | *Break* |
| | **Sessions**<br>**Chair T. Papadopoulo**<br>*Grand Chelem Room* |
| 9:30AM | Leveraging AI Technologies in Imaging<br>to Unlock the Power of Precision Medicine<br>N. Boujeema, Median Technologies |
| 9:50AM | Source-Target Proximity Analysis in Protein Networks<br>Using Random Walks with Restart;<br>Applications to Cancer Drug Resistance Prediction from Single-Cell Data<br>F. Cazals, INRIA<br>J. Roux, Université Côte d'Azur<br>A. Jean-Marie, INRIA<br>D. Mazauric, INRIA<br>G. Santa Cruz, INRIA |
| 10:30AM | Clinical Setting Specific Semi-Supervised Approach to Model Synthetic<br>Genomes of Pregnant Women to Determine Confidence Intervals for NIPT<br>S. Bottini, MDLab |
| 10:50AM | *Break* |
| 11:00AM – 1PM | **CLOSING SESSION** |

SOPHI.A
SPRINGBOARD FOR ARTIFICIAL INTELLIGENCE

SOPHI.A SUMMIT 2019

SIDE EVENTS

# SOPHI.A SUMMIT 2019
## FREE OF CHARGE SIDE EVENTS

## AI MASTER CLASSES
**Tue. November 19th**

**8:30AM – 5PM**

📍 **Campus Polytech Nice Sophia**
*930 Route des Colles, 06410 Biot Sophia Antipolis*

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## AI EDUCATION FORUM
**Tue. November 19th**

**10AM – 4PM**

📍 **Campus SophiaTech, Espace Entreprises**
*930 Route des Colles, 06410 Biot Sophia Antipolis*

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## PUBLIC CONFERENCE
## "ARTIFICIAL INTELLIGENCE DOESN'T EXIST"

**A Talk by Luc Julia**
*Innovation Vice-President at Samsung, Author & Co-inventor of Siri*

**Sat. November 23rd**
**4PM – 6:30PM**

📍 **Palais des Congrès Antibes - Juan les Pins**
*60 Chemin des Sables, 06160 Antibes*

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