# Deep Learning and Reinforcement Learning Summer School 2018

**Apply**

2018

July 25th – August 3rd, 2018

Desautels Hall
Rotman School of Management
University of Toronto
105 St George St
Toronto, ON, Canada
M5S 3E6

# About

## Deep Learning Summer School (DLSS)

July 25 – 31, 2018

Deep neural networks are a powerful method for automatically learning distributed representations at multiple levels of abstraction. Over the past decade, they have dramatically pushed forward the state-of-the-art in domains as diverse as vision, language understanding, robotics, game playing, graphics, health care, and genomics. The DLSS will cover both the foundations and applications of deep neural networks, from fundamental concepts to cutting-edge research results.

DLSS is aimed at graduate students, postdocs, and industry professionals who already have some basic knowledge of machine learning (and possibly but not necessarily of deep learning) and wish to learn more about this rapidly growing field of research.

Organizing committee members: Yoshua Bengio, Aaron Courville, Roger Grosse, Graham Taylor

## Reinforcement Learning Summer School (RLSS)

August 1 – 3, 2018

The RLSS will cover the basics of reinforcement learning and show its most recent research trends and discoveries, as well as present an opportunity to interact with graduate students and senior researchers in the field.

RLSS is intended for graduate students in Machine Learning and related fields. Participants should have advanced prior training in computer science and mathematics.

Organizing committee members: Amir-massoud Farahmand, Joelle Pineau, Doina Precup

Preference will be given to students from research labs affiliated with the CIFAR program on Learning in Machines and Brains.

The 2018 DLSS and the RLSS are hosted by the **Canadian Institute For Advanced Research (CIFAR)** and the **Vector Institute**, with participation and support from the **Alberta Machine Intelligence Institute** and the **Institut québécois d'intelligence artificielle (MILA).**

# Schedule

A detailed schedule will be posted in the coming weeks.

**DEEP LEARNING SUMMER SCHOOL: JULY 25 – 31, 2018**

**REINFORCEMENT LEARNING SUMMER SCHOOL: AUGUST 1- 3, 2018**

There will be no formal summer school programming on July 29, 2018. Optional extracurricular programming (e.g. networking and tourism events) will be offered.

# Confirmed Speakers

## Deep Learning Summer School (DLSS)

**SANJEEV ARORA**

PRINCETON UNIVERSITY

**JIMMY BA**

UNIVERSITY OF TORONTO, VECTOR INSTITUTE

**YOSHUA BENGIO**

MONTREAL INSTITUTE FOR LEARNING

ALGORITHMS, UNIVERSITY OF MONTREAL

### SANJA FILDER

UNIVERSITY OF TORONTO, VECTOR INSTITUTE

### KATHERINE HELLER

DUKE UNIVERSITY

### PHIL ISOLA

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

### BALÁZS KÉGL

UNIVERSITÉ PARIS SACLAY

### BEEN KIM

GOOGLE BRAIN

### HUGO LAROCHELLE

GOOGLE BRAIN

### GRAHAM NEUBIG

CARNEGIE MELLON UNIVERSITY

### JORGE NOCEDAL

NORTHWESTERN UNIVERSITY

### SAGEEV OORE

DALHOUSIE UNIVERSITY, VECTOR INSTITUTE

### BLAKE RICHARDS

UNIVERSITY OF TORONTO

### JONATHON SHLENS

GOOGLE RESEARCH

### ANDREW WILSON

CORNELL UNIVERSITY

# Reinforcement Learning Summer School (RLSS)

**MARC BELLEMARE**

GOOGLE BRAIN

**MICHAEL BOWLING**

UNIVERSITY OF ALBERTA

**EMMA BRUNSKILL**

STANFORD UNIVERSITY

**HAL DAUMÉ III**

UNIVERSITY OF MARYLAND, COLLEGE PARK

**AMIR-MASSOUD FARAHMAND**

VECTOR INSTITUTE

**MOHAMMAD GHAVAMZADEH**

DEEPMIND

**TOR LATTIMORE**

DEEPMIND

**SERGEY LEVINE**

UNIVERSITY OF CALIFORNIA, BERKELEY

**DOINA PRECUP**

MCGILL UNIVERSITY

**RICHARD SUTTON**

ALBERTA MACHINE INTELLIGENCE INSTITUTE,

UNIVERSITY OF ALBERTA

# Application & Fees

**Apply Now**

The deadline to apply is **March 26, 2018 at 3:59:59 PM EST**

## Important Dates

| | |
|---|---|
| **MARCH 2** | Online applications open |
| **MARCH 26** | Deadline to submit completed applications |
| **END OF APRIL** | Decisions communicated to all applicants and accepted applicants invited to register |
| **MAY 31** | Deadline to register and submit abstracts for poster presentations or contributed talks |
| **JUNE 8** | Visa support letters issued |
| **END OF JUNE** | Decisions on poster presentations or contributed talks communicated to successful candidates |

## Selection Process

DLSS and RLSS use a scoring system to select the majority of participants. Decisions will be made stochastically, and applicants with a higher score will have a higher probability of being accepted. The scoring system favours an applicant who is a graduate student and whose research area is closer to the scope of the summer school(s). It also favours applicants who are from a Canadian university, an under-represented group, contribute to a research blog or an open-source project, and those who have not having attended the schools before.

# Fees

Fees will be charged at the time of registration.

| | DLSS | RLSS | DLSS & RLSS |
|---|---|---|---|
| **STUDENTS** (If you are currently enrolled as a student or if you are a recent graduate and you are enrolled to begin another program within a year.) | $550 (CAD) | $225 (CAD) | $685 (CAD) |
| **POSTDOCS** (If you are currently working as a Postdoc or if you are a recent graduate and have confirmed plans to start a Postdoc position.) | $550 (CAD) | $225 (CAD) | $685 (CAD) |
| **ACADEMIC OR NOT-FOR-PROFIT RESEARCHER** (e.g. faculty or full-time researcher at a not-for-profit institution) | $850 (CAD) | $425 (CAD) | $1060 (CAD |
| **OTHER** (e.g. industry researcher, etc.) | $1500 (CAD) | $750 (CAD) | $1875 (CAD |

# Financial Support

Limited financial support will be available for students and details will be communicated when registration opens. Students are also encouraged to look to their affiliated institutions for additional funds to cover expenses.

# Special Accomodation

We are committed to ensuring equal opportunity and accessibility. If you need any special accommodations, please contact us at info@dlrlsummerschool.ca.

# Frequently Asked Questions

?   Where will the summer school take place?

?   What language will the summer schools be held in?

?   When will decisions be made about applications?

?   I just graduated but will be starting another program in the fall. Can I apply as a student?

?   Can I apply if I am not a student?

?   Will financial support be available?

?   Will completion certificates be issued confirming a student's attendance at the summer school(s)?

?   Can I apply to both schools?

?   I did not receive confirmation that my application was submitted. Did it go through?

?   What is the DLSS/RLSS looking for?