Dongyan Lin

Computational Neuroscience \cdot Machine Learning \cdot Neural Networks

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EDUCATION

Sep. 2019 – present

Ph.D. in Computational Neuroscience

McGill University, Canada

I am a PhD candidate in computational neuroscience at the Integrated Program of Neuroscience at McGill University and Mila. My research lies at the intersection of neuroscience and artificial intelligence. Specifically, I am interested in designing artificial agents whose behaviours and neural representations resemble those observed in animals, as well as developing novel machine learning tools to analyze neural data. cGPA: 4.00/4.00

Sep. 2015 - Jun. 2019

Hon. B.Sc. in Physiology (high distinction)

University of Toronto, Canada

Minored in Mathematics and Psychology.

cGPA: 3.87/4.00

RESEARCH EXPERIENCE

Sep. 2019 – present

Ph.D. Student

MILA; McGILL UNIVERSITY

Advisor: Dr. Blake Richards

Project: An artificial intelligence framework for the neural basis of time-dependent working

memory

Sep. 2018 - Apr. 2019

Lab Manager / Research Assistant

DEPARTMENT OF PSYCHOLOGY, UNIVERSITY OF TORONTO

Advisor: Dr. Katherine Duncan

Project: Measurement of familiarity to objects with the naming experiment

Jun. 2018 - Aug. 2018

Bioinformatics Intern

RIKEN, JAPAN

Advisor: Dr. Michiel de Hoon

Project: Elucidating the functional roles of anti-sense transcripts in human THP-1 leukemia cells

with computational methods

May. 2017 – Aug. 2017

Research Student

SICKKIDS HOSPITAL; UNIVERSITY OF TORONTO

Advisor: Dr. Steven Prescott

Project: In vitro chloride regulation of mouse hippocampal gamma oscillations

Presentations

- I. Dongyan Lin, FANTOM Consortium, Michiel de Hoon. Elucidating the functional roles of anti-sense transcripts in human THP-1 leukemia cells with computational methods. Summer Undergraduate Research Symposium, Department of Cell & System Biology, University of Toronto. September 2018. Received the Best Poster Award.
- 2. **Dongyan Lin**, Stephanie Ratté, Steven Prescott. The chloride regulation of mouse hippocampal gamma oscillation in vitro. University Research Opportunity Program Awardee Seminar, University of Toronto. August 2017.

Honours

2020	IVADO MSc Excellence Scholarship (\$40,000)	IVADO
2019	Recruitment Award (\$5,000)	McGill University
2018	Innis College Exceptional Achievement Award (\$735)	University of Toronto
2019, 2018, 2017, 2016	Dean's List	University of Toronto
2017	Unversity Research Opportunity Program Award (\$2,000)	University of Toronto

Dongyan Lin Curriculum Vitæ

2017	Innis College Later Life Learning OSOTF Award (\$1,336)	University of Toronto
2016	Innis College Later Life Learning OSOTF Award (\$1,289)	University of Toronto
2016	Beatty Scholarship (\$1,500)	University of Toronto
2015	Entrance Scholarship (\$6,000)	University of Toronto
2015	Canada Governor General's Academic Bronze Medal	Winnipeg, Manitoba

SKILLS

Experimental neuroscience: extracellular recording, surgery, slice preparation

Programming: Python, UNIX, MATLAB, Łatex, HTML, Pytorch Natural Languages: Mandarin (native), English (fluent), French (basic)

TEACHING EXPERIENCE

Nov. 2019 - Mar. 2020 Volunteer Classroom Instructor

BrainReach, Montréal, Canada

Delivered introductory neuroscience classes to Grade 9 students of a secondary school in Montréal.

Sep. 2018 – Apr. 2019 Teaching Assistant: MAT135 (Calculus I), MAT136 (Calculus II) UNIVERSITY OF TORONTO

Prepared and delivered tutorials; held office hours; graded assignment, tests, and exams; delivered a guest

lecture.

Sep. 2016 – Apr. 2018 Classroom Instructor

Easy Group Inc., Toronto, Canada

Prepared and delivered tutorials and exam review sessions on calculus and multivariable calculus.

VOLUNTEER & COMMUNITY SERVICE

Nov. 2020	Montréal AI & Neuroscience (MAIN) Conference	Organizer
May 2020	UNIQUE Student Symposium	Organizer
May 2018 – Apr. 2019	First-year Learning Community, University of Toronto	Peer Mentor
May 2018 – Apr. 2019	iConnect Mentorship Program, University of Toronto	Event Leader
May 2017 – Apr. 2018	iConnect Mentorship Program, University of Toronto	Mentor

GRADUATE COURSEWORK

Winter 2020	COMP767: Reinforcement Learning	Α
Winter 2020	NEUR631: Principles of Neuroscience II	А
Fall 2019	NEUR630: Principles of Neuroscience I	Α