

Veronica Chelu

PhD Candidate at McGill University,
School of Computer Science, Montreal, Canada

✉ veronica.chelu@mail.mcgill.ca
✉ veronika.chelu@gmail.com
🌐 veronicachelu.github.io

Research

interests *RL & sequential decision making, policy optimization, deep & continual/lifelong learning
theoretical & computational neuroscience, neuroplasticity, psychedelic research*

Education

- 2019–present **Ph.D. in Computer Science**, McGill University, Montreal
Lifelong learning & planning in RL—leveraging optimism, adaptivity & plasticity. Advised by Prof. Doina Precup.
- 2016–2018 **M.Sc in Computer Science**, University “Politehnica” Bucharest, Bucharest
Specialization: Artificial Intelligence. *Master Thesis:* The influence of exploratory behaviour on temporal abstraction and subgoal identification in hierarchical reinforcement learning.
- 2009–2013 **B.Sc in Computer Science**, University “Politehnica” Bucharest, Bucharest
Bachelor Thesis: Emotion simulation on virtual 3D face models.

Academic awards

- 2022–2024 **FRQNT, Fonds de recherche du Quebec**, Nature and Technology
- 2021–2023 **IVADO’s PhD Excellence scholarship**
- 2020–2021 **Borealis AI 2020–2021 Fellowship**
- 2016–2018 **Excellence Scholarship**, for the M.Sc in Computer Science and Engineering at University “Politehnica” Bucharest, funded by the Romanian government
- 2016–2018 **Merit Scholarship**, for the M.Sc in Computer Science and Engineering at University “Politehnica” Bucharest, funded by the Romanian government
- 2009–2013 **Merit Scholarship**, for the B.Sc in Computer Science at University “Politehnica” Bucharest, funded by the Romanian government

Industry experience

- April 2022 – **Research Scientist Intern**, DeepMind, Montreal, CA
April 2023 Host: Arthur Guez, Manager: Doina Precup
- Feb 2020 – **Research Scientist Intern**, DeepMind, London, UK, Core RL team
July 2020 Host: Hado van Hasselt, Manager: David Silver
- 2016–2018 **Research Engineer**, Apsisware, Bucharest, LG Electronics R&D team
Worked on: *Scene Understanding for assisted technology and autonomous driving* and *Generative models with application to facial recognition*
- 2016 **Machine Learning Engineer**, Sparktech Software, Bucharest
- 2015 **Software Engineer**, Deutsche Bank, Bucharest
- 2014 **Software Engineer**, Misys, Bucharest
- 2013 **Software Engineer**, Cronian Labs, Bucharest

Academic experience, mentorship, teaching & talks

- Summer 2023 **Research mentorship of undergraduate students**, Nathan De Lara (project: *Model-based learning for non-stationary continuous control environments*), and Steve Wen (project: *Adaptive exploration for non-stationary continuous control environments*)
- June 2023 **Talk on Acceleration via Optimism and Adaptivity**, Mila RL workshop 2023
- Summer 2020 **Talk on Forethought and Hindsight in Reinforcement Learning**, RL Sofa, Mila 2020
- Summer 2020 **Teaching assistant and mentor**, AI4SocialGood Summer Lab 2020, [details]
- Winter 2020 **Teaching assistant for the Reinforcement Learning course**, McGill University, [Comp767]

- July 2019 **Contributed talk on *Option Discovery by Aiming to Predict***, *Modeling Inductive Biases in Reinforcement Learning Workshop*, at Reinforcement Learning and Decision Making (RLDM) 2019
- Spring 2018 **Lecturer for Deep Learning for Visual Arts**, *Faculty of Mathematics and Computer Science, University of Bucharest*
- June 2018 **Applied deep learning for vision, sound and control**, *Faculty of Mathematics and Computer Science, University of Bucharest*, Recent Advances in Artificial Intelligence (RAAI) 2018
- Summer 2018 **Lectures and workshops on Reinforcement Learning**, *University "Politehnica" Bucharest*, ROSEdu - Romanian Open Source Education, [[details](#)]

Committee, reviewing and volunteering

Volunteering, Organized the “Professor Series” event for the Reasoning and Learning (RL) lab meetings—where each week we hosted professors from the McGill/Mila ecosystem to give talks on their broad research direction and offer career advice

Conference proceedings, *NeurIPS* (2023, 2021), *ICLR* (2024, 2023, 2022), *ICML* (2023, 2020 (33%))

Workshops, *Deep RL Workshop NeurIPS* (2020, 2021) *Multitask and Lifelong Reinforcement Learning Workshop ICML* (2019), *WIML NeurIPS* (2018, 2019), *Continual Learning Workshop NeurIPS* (2018)

Training courses

Fall 2019 **Probabilistic Analysis of Algorithms and Data Structures**, *with Prof. Dr. Luc Devroye*, COMP 690 at McGill University, [🔗](#)

Summer 2019 **Deep Learning and Reinforcement Learning Summer School (DLRL) 2019**, *at University of Alberta*

Summer 2018 **Transylvanian Machine Learning Summer School (TMLSS) 2018**, [🔗](#)

Computer & programming skills

💻 Python, C, C++, Git, Unix, Latex

ML/DL Jax, Tensorflow, Pytorch, Numpy, Matplotlib

Life

meditator, yogi (certified instructor 200h RYT), self-taught amateur handbalancer & contortionist, naïve artist (painting oil on canvas, drawing)