

Anirudha Kemptur

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🌐 anirudhk686

Education

- 2020–Present **Masters in Computer Science**, *MILA - Quebec AI Institute - University of Montreal*, Montreal, Canada.
- 2015–2020 **B.E.(Hons.) in Computer Science**, *Birla Institute of Technology and Science (BITS) Pilani*, Pilani Campus, India, *CGPA 8.76/10*.
- 2015–2020 **M.Sc.(Hons.) in Economics**, *Birla Institute of Technology and Science (BITS) Pilani*, Pilani Campus, India, *CGPA 8.76/10*.
5 Year Dual Degree Program

Software skills

- Expertise* Machine learning - Deep reinforcement learning, Computer vision
Computational Neuroscience
- Languages* Professional: Python
Intermediate: Java, C, Verilog
- Libraries* Pytorch, TensorFlow, Open-AI gym, Django

Experience

- February'20–Present **Research Assistant**, *MILA - Quebec AI Institute*, Montreal, Canada.
Dr. Karim Jerbi
- Exploring similarities between sleep and anaesthesia using EEG data.
 - Developing methods of domain transfer between sleep and anaesthesia using Domain adversarial neural networks.
- September'19–December'19 **Bachelor Thesis**, *Rationality Enhancement Group*, Max Planck Institute for Intelligent Systems, Tübingen, Germany.
Dr. Falk Lieder
- Developing strategies robust to model-misspecification using Meta-level Reinforcement learning and Bayesian Inference.
- May'19–August'19 **MITACS Globalink Research Intern**, *Computational and Cognitive Neuroscience Lab*, Université de Montréal, Montreal, Canada.
Dr. Karim Jerbi
- Study of EEG sleep data using Convolutional neural networks.
- Jan'19–May'19 **Research Assistant**, *CSIR - Central Electronics Engineering Research Institute*, Pilani, India.
Dr. J L Raheja
- Worked on control of Robot manipulator using Deep reinforcement learning techniques.
- June'18–August'18 **Research Intern**, *Computational Neuroscience lab*, *IIT- Madras*, Chennai, India.
Prof. Dr. V Srinivasa Chakravarthy
- Worked on Computational Neuro-modeling of Reinforcement learning in the brain.
- May'17–July'17 **Summer Intern**, *National Centre for Antarctic and Ocean Research*, Goa, India.
Mr. Sakthivel Samy V
- Worked on developing a facial recognition system (Currently being used for automatic attendance monitoring at the institute).
 - Modeled Antarctic temperature data using ARIMA approach.

Other Projects

- July'17 **Facial recognition system using Convolutional Neural Network.**
- Followed a three step approach: face detection, encoding and comparison.
 - VGG-16 Net architecture used.
 - Transfer Learning was used to generalize the model.
- [\[Code\]](#)
- June'17 **Antartic weather data analysis.**
- Analyzed temperature data with the Autoregressive Integrated Moving Average Model.
 - Forecast was also done based on the obtained model.
- [\[Project Report\]](#) [\[Code\]](#)
- Dec'16 **Stock Market Simulator.**
- A trading platform built using Django, built for college technical fest
 - Server hosted on LAN, participants could register and trade with their mobile.
- [\[Code\]](#)

Coursework

- Computer Science* Convolutional Neural Networks for Visual Recognition, Deep Reinforcement learning , Machine Learning, Data Structures and Algorithms, Microprocessors and Interfacing, Object Oriented Programming
- Mathematics* Probability and Statistics, Econometric methods, Linear Algebra, Calculus

Publications

- June'20 **Leveraging Machine Learning to Automatically Derive Robust Planning Strategies from Biased Models of the Environment**, *CogSci 2020: Annual Meeting of the Cognitive Science Society*.
- [\[Paper\]](#) [\[Video\]](#)

Organisations

- Aug'15– **Association for Computing Machinery**, *BITS-Pilani Student Chapter*, Core Team.
- May'20 ◦ Chapter has been awarded the Best Student Chapter in India for 3 consecutive years with a recognition from ACM International.
- [\[Website\]](#)

Achievements

- February'20 **Mitacs Research fellowship.**
- Financial award of 6000 CAD to participate as research intern in Canada for 4 months.
- January'19 **Mitacs Globalink Scholarship.**
- Financial award to participate as research intern in Canada for 3 months and also scholarship of 15,000 CAD to pursue Masters.
- June'15 **Jee mains All India Rank-3320.**
- 13 Lakh Students had appeared for the exam