# Anirudha Kemtur

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#### Education

- 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

- 2013–2015 Class 12-Karnataka State Board, Deeksha College, Bangalore, India, Percentage 93.5.
- 2003–2013 Class 10-ICSE Board, Swargarani School, Bangalore, India, Percentage 91.4.

#### Software skills

Expertise Machine learning - Deep reinforcement learning, Computer vision

Computational Neuroscience

Languages Professional: Python

Intermediate: Java, C, Verilog

Libraries Pytorch, TensorFlow, Open-Al gym , Django

## Experience

February'20— **Research Intern**, *MILA* - *Quebec Al Institute*, Montreal, Canada.

Present Dr. Karim Jerb

- o 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– **Bachelor Thesis**, *Rationality Enhancement Group*, Max Planck Institute for Intelligent Systems, December'19 Tübingen, Germany.

Dr. Falk Lieder

- Developing strategies robust to model-misspecification using Meta-level Reinforcement learning and Baysian Inference.
- May'19- MITACS Globalink Research Intern, Computational and Cognitive Neuroscience Lab, Univer-

August'19 sité de Montréal, Montreal, Canada.

Dr. Karim Jerbi

- Study of EEG sleep data using Convolutional neural networks.
- Jan'19- Research Assistant, CSIR Central Electronics Engineering Research Institute, Pilani, India.

May'19 Dr. J L Raheja

- Worked on control of Robot manipulator using Deep reinforcement learning techniques.
- June'18- Research Intern, Computational Neuroscience lab, IIT- Madras, Chennai, India.
- August'18 Prof. Dr. V Srinivasa Chakravarthy
  - Worked on Computational Neuro-modeling of Reinforcement learning in the brain.
  - May'17- Summer Intern, National Centre for Antarctic and Ocean Research, Goa, India.
  - July'17 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.

- o 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 Convolutional Neural Networks for Visual Recognition, Deep Reinforcement learning, Machine Science Learning, Data Structures and Algorithms, Microprocessors and Interfacing, Object Oriented Programming

Mathematics Probablity 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.

o 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