

Anirudha Kementur

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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 8.7/10*.
- 2015–2020 **M.Sc.(Hons.) in Economics**, *Birla Institute of Technology and Science (BITS) Pilani*, Pilani Campus, India, *CGPA 8.7/10*.
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-AI gym, Django

Experience

- May'19– Present **MITACS Globalink Research Intern**, *Computational and Cognitive Neuroscience Lab*, Université de Montréal, Montreal, Canada.
Dr. Karim Jerbi
- Classification of EEG signals using deep neural networks.
 - Using Convnet with Adversarial training to classify and extract features that separate high dream recall group from low dream recall.
- 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.
 - Customized FetchReach Open-AI gym environment to include obstacles. DDPG + HER used along with modified reward function.
- [Project video]
- 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(Basal Ganglia region).
- Feb'18– April'18 **Research Assistant**, *CSIR - Central Electronics Engineering Research Institute*, Pilani, India.
Dr. A. S. Mandal
- Worked on classification of EEG(Brain Signals) data as a part of the project "Drone Maneuvering using Brain-machine Interfaces".

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.
- Project details mentioned below.

Other Projects

July'17 **Facial recognition system using Convolutional Neural Network.**

- Followed a three step approach: face detection, encoding and comparison.
- Face encoding was based on the approach suggested in [M. Parkhi et al., 2015](#).
- VGG-16 Net architecture used and was implemented using keras library.
- Transfer Learning was used to generalize the model.
- Second last layer's feature vectors were extracted and were compared using cosine similarity.

[\[Project Blog\]](#) [\[Code\]](#)

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

Organisations

Aug'15– **Association for Computing Machinery, BITS-Pilani Student Chapter, Core Team.**

Present ◦ Chapter has been awarded the Best Student Chapter in India for 3 consecutive years with a recognition from ACM International.

- We try to instill an interest amongst the members for various forms of software and hardware related skills via Special Interest Groups and lectures.

[\[Website\]](#)

Achievements

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