

Yatin Dandi

SOPHOMORE · COMPUTER SCIENCE AND ENGINEERING

IIT Kanpur

☎ (+91) 900-574-0313 | ✉ yatind@iitk.ac.in | 🏠 [yatindandi.github.io](https://github.com/yatindandi) | 🌐 <https://github.com/yatindandi>

Education

Indian Institute of Technology Kanpur

BACHELOR OF TECHNOLOGY, MAJOR IN COMPUTER SCIENCE AND ENGINEERING

• Cumulative Performance Index : 10.0/10.0

Kanpur, India

July, 2017 - Present

Honors & Awards

- 2017 **Aditya Birla Scholarship**, Awarded to 15 students from all IITs
- 2017 **Academic Excellence Award**, Awarded for exceptional performance
- 2016 **KVPY Scholarship, 2016**, Indian Institute of Science
- 2015 **NTSE Scholarship**, Government of India
- 2017 **All India Rank 135**, JEE Advanced 2017, 150000 candidates
- 2017 **All India Rank 960**, JEE Mains 2017, 1.5 million candidates
- 2016 **Selected for Indian National Physics Olympiad**, HBCSE
- 2016 **Selected for Indian National Chemistry Olympiad**, HBCSE

Mumbai, India

IIT Kanpur

Bangalore

India

India

India

Mumbai, India

Mumbai, India

Experience

New York Office, IIT Kanpur

IIT Kanpur

MACHINE LEARNING FOR LARGE SCALE LOGISTICS PLATFORM, UNDER PROF. MANINDRA AGARWAL

May 2018 - July 2018

- Implemented a state of the art algorithm for online collaborative filtering based on Fast Matrix Factorization for Online Recommendation with Implicit Feedback (He et al.) using Numpy and improved the model with sentiment and frequency dependent weighting schemes.
- Used Kafka for real-time data processing and simulated interactions using locust.
- Implemented a Recommender system based on Deep Autoencoders and compared the results with other models using metrics such as hit ratio.
- Implemented a Bidirectional LSTM model using Keras for sentiment analysis of user comments.
- Trained the Latent Dirichlet allocation model on Wikipedia articles for automatic extraction of topics.

Disentangled Representation Learning using Generative Models

IIT Kanpur

UNDERGRADUATE PROJECT UNDER PROF. NISHEETH SRIVASTAVA

May 2018 - Present

- Studied various approaches for learning disentangled representations such as β VAE and infoGAN.
- Implemented a Variational Autoencoder model for disentangling of time invariant content and dynamics in sequential data (Mandt et al.) using Pytorch.
- Presently implementing an architecture combining VAE and GAN to measure similarities using learned representations.
- Working on applications in Reinforcement Learning and clustering of videos.

Computational Models for Inference of Social Dynamics

IIT Kanpur

UNDERGRADUATE PROJECT UNDER PROF. NISHEETH SRIVASTAVA

May 2018 - July 2018

- Developed an animation engine for simulating social situations using Paper.js.
- Studied Bayesian models of emotion inference and perception.
- The motion of autonomous characters was based on work by Reynolds, C. W. and the social force model for crowd behavior simulation.
- Conducted experiments to study the effect of variation of multiple parameters of the engine to determine the underlying cause of emotion inference in animated characters.

Deep Reinforcement Learning for Atari Games

IIT Kanpur

ASSOCIATION FOR COMPUTING ACTIVITIES, IIT KANPUR

February 2018 - May 2018

- Used Numpy to implement various reinforcement learning algorithms such as Dynamic Programming (Policy and Value iteration), Monte Carlo (Epsilon-greedy and off-policy), TD Learning (Q-Learning and SARSA) and Q-Learning with Function Approximation.
- Implemented Deep Q-Learning and Policy Gradient methods for Atari Games using PyTorch and OpenAI Gym.

Image Captioning with Visual Attention

IIT Kanpur

PROGRAMMING CLUB, IIT KANPUR

February 2018 - May 2018

- Compared various CNN based models for image classification and implemented them using eager execution in Tensorflow.
- Implemented the model described in Show, Attend and Tell (Xu et al.2015) using Tensorflow's estimator API and evaluated the model on MS COCO dataset.

Microsoft code.fun.do hackathon

IIT Kanpur

NATIONAL-LEVEL HACKATHON WINNER

February 2018

- Selected out of 120 students to represent IIT Kanpur at Microsoft Hyderabad center to showcase our project in their academia-industry collaboration event AXLE.
- Built an interactive interface using D3.js to display changing geopolitical relations and popularity of world leaders.
- Scraped world news using scrapy
- Performed sentiment analysis and named entity-recognition using NLTK, Spacy and Stanford CoreNLP.

POSITIONS OF RESPONSIBILITY

Programming Club

IIT Kanpur

SECRETARY

April 2018 - Present

- Helped conduct and organize Linux fest, introductory workshops and various hackathons.

Relevant Courses

Introduction to Programming
Discrete Mathematics
Computational Cognitive Science

Probability for Computer Science
Logic for Computer Science
Linear Algebra and ODE

Skills

Programming Languages

C, C++, Python, Javascript, MATLAB, Octave

Libraries and frameworks

Tensorflow, Pytorch, Scikit-Learn, Pillow, Keras, Gensim, NLTK

Web

Django, Flask, HTML, CSS, jQuery, MySQL, Paper.js, D3.js

Utilities

LaTeX, Git, Kafka

Extra Curricular

- Delivered a talk on Brain-Computer Interface in an event organized by Science Coffee House, IIT Kanpur.
- Winner of Blackbox - a three hour high speed hackathon based on an Esoteric language organized by Programming Club IIT Kanpur.