

Vinayak Trivedi

vinayakt@iitk.ac.in | (+91)8887563887 | Github:// [vinayaktrivedi](#)

ACHIEVEMENTS

- Secured All India Rank 147 in JEE Advanced 2016
- Secured All India Rank 70 in KVPY 2015, SX Stream.

EDUCATION

IIT KANPUR

BTECH IN COMPUTER SCIENCE AND ENGG.

Expected 2020 | Kanpur, India
CGPA: 8.8/10

STAR INTL. SCHOOL

INTERMEDIATE -CBSE BOARD

2016 | Ranchi, India
Percentage: 92

JNV EAST SINGHBHUM

MATRICULATION -CBSE BOARD

2014 | Baharagora, India
CGPA: 10/10

SKILLS

PROGRAMMING LANGUAGES

C/C++ • Python • PHP • NodeJS • Octave • Shell • R • JQuery • \LaTeX

SOFTWARES AND TOOLS

• Tensorflow • Git • Apache JMeter • Locust • Kibana • Docker • Postman

MAJOR INTERESTS

• Software Development • Competitive programming • Algorithms • Data Structures • Server Administration • Machine Learning • Deep Learning • Full Stack Web Development • Open Source Programming

COURSEWORK

COMPUTER SCIENCE

Data Structures and Algorithms, Algorithms II*, Machine Learning*, Operating system*, Randomised Algorithms*, Theory of Computation*, Computer Organisation

MATHEMATICS

Real Analysis And Multi-Variable Calculus
Linear Algebra and ODE
Probability and Statistics
Discrete Mathematics

* Ongoing Courses

WORK EXPERIENCE AND MENTORSHIP

PHARMEASY | TECH DEVELOPMENT INTERN

May 2018-July 2018 | Mumbai, India

- **Built a Server side local cache using Redis Database.** Performed Load Testing of databases of Redis, Aerospike and Memcached using JMeter and Locust. With PHP Integration, Redis was best in terms of Response-time.
- Simulated concurrent connections on Redis database using Pthreads in Python, in order to test Connection and Data Timeout with Unix Socket.
- Coded the Back-end part in Yii PHP Framework. Monitored Cache Hits and Misses using NewRelic, and Logs using Kibana.
- **Achieved about 50 percent drop in Database queries of tables cached, and 25 percent drop in response-time.**

ACA, IIT KANPUR | PROJECT MENTOR (WEB MOVIE RECOMMENDER)

Jan 2018 – April 2018

- Project was to develop a Web App Movie Recommender, using Bootstrap for front-end, NodeJS for back-end and MYSQL for database. Recommendation Algorithm was coded in Python.
- **Item-based and User-based Collaborative Filtering** were used in project to Recommend new movies to users, based on their previous watch history.

PROJECTS

SIP PORTAL | E-Cell, IITK | December 2017

- Developed Internship Portal for SIP, IITK. Portal has features like Company Notifications, Job openings, Dashboard for Latest News, Internship Stats etc. Portal serves as an interface between students, Admin and companies.
- Coded using **PHP CodeIgniter Framework** for backend with **MYSQL database**. Deployed the portal on server of IITK. Portal link is [SIP PORTAL](#).

VAAD SAMVAAD | Programming Club, IITK | May-July 2017

- Project was to develop social networking website with features of status posting, messaging, notifications, activities etc, all in real-time.
- Coded using **NodeJS, socket.io and Express Framework** for back-end. MongoDB used for database. Link to the site is [VAAD SAMVAAD](#).

AM PORTAL | Counselling Service, IITK | August-December 2017

- Designed a portal for Academic Mentors in IIT Kanpur, which serves as a Question-answer and Discussion forum. Portal has other features like direct student-AM linking, Announcements, Polls etc.
- Coded using **PHP CodeIgniter Framework** for back-end with MYSQL database. Enabled CC Authentication. Link of portal is [AM PORTAL](#).

SELF PROJECTS

DEEP LEARNING | Image Classification | January-March 2018

- Studied about **Neural Networks, especially CNNs**. Worked with Tensorflow library to classify images of MNIST dataset and CIFAR-10, both using simple neural network with Softmax function and then with CNN.
- Got **96 % accuracy** with MNIST and **70 % accuracy** with CIFAR-10 dataset.

EXTRA CURRICULAR

- Web Executive, E-Cell, IITK (2017-2018).
- Volunteer, Counselling Service, IITK (2017).