

# Tanvi Ajay Nerkar

SOPHOMORE UNDERGRADUATE · ELECTRICAL ENGINEERING

Indian Institute of Technology Kanpur, India

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## Education

### Indian Institute of Technology Kanpur

BACHELOR OF TECHNOLOGY, ELECTRICAL ENGINEERING · CGPA: **8.7 / 10.0**

Kanpur, India

2018 - 2022 (exp.)

### National Public School Indiranagar

CBSE BOARD · SCHOOL TOPPER AMONG ALL STREAMS · SCORE: **97.4%**

Bangalore, India

2018

### Baldwin Girls' High School

ICSE EXAMINATION · SCHOOL TOPPER · SCORE: **97.8%**

Bangalore, India

2016

## Honors & Awards

### ACADEMIC

- 2018 **All India Rank 1299**, Joint Entrance Examination (Advanced)
- 2018 **All India Rank 626**, Joint Entrance Examination (Main)
- 2017 **All India Rank 101**, Kishore Vaigyanik Protsahan Yojana, Indian Institute of Science
- 2013 **International Rank 2**, International Cyber Olympiad, SOF Organisation
- 2013 **International Rank 23**, International Mathematics Olympiad, SOF Organisation

India

India

Bangalore, India

India

India

### CO-CURRICULAR

- 2015 **The Young Scientist of the Year**, received from Late Dr. APJ Abdul Kalam
- 2016 **Best Vice Captain Award**, Baldwin Girls' High School
- 2014 **City Topper**, The Times NIE Think and Learn Challenge
- 2012 **National Rank 2**, Max Life Insurance iGenius Scholarships among **1 lakh students**

Bangalore, India

Bangalore, India

Bangalore, India

India

## Work Experience

### CSE@IITK Summer of Code

PARTICIPANT · FULL STACK DEVELOPER

IIT Kanpur, India

May 2019 - Jul. 2019

- Built a centralized inventory and finance tracking **Smart Purchase App** for the NGO Vitraag Vigyaan.
- Developed a full stack web application using the MERN stack.
- Worked primarily on the frontend using ReactJS.

### Infosys, Ltd.

STUDENT INTERN · SPARK CATCH THEM YOUNG PROGRAM

Bangalore, India

April 2014

- Topper** of a batch of 40 students, selected from **over 1000 candidates** from top 250 schools in Bangalore.
- Gained industrial exposure to theoretical aspects and practical applications of Cloud Computing, Software Development Methodology Analysis, Databases, Web and Mobile Application Development and Software Testing.
- Learnt skills such as Advanced Office functions, Visual Studio and Adobe Photoshop.

### Technovation Challenge

PARTICIPANT · INTERN · HEAD OF PROGRAMMING

Bangalore, India

Feb. 2014 - Jul. 2014

- Mentored by Vice President and Manager of **Goldman Sachs** as an intern there, sponsored by **Iridescent Ltd.** and **WeTech** as a part. of the **Clinton Global Initiative**.
- Led team of 5 to build and deploy mobile app developed using MIT App Inventor 2 and Google Fusion Tables.
- Designed to help high school girls explore different career options through a virtual game setting.
- Presented the application, business plan and implementation vision at the Regional Pitch Event in Bangalore.

## Projects

### Life@IITK

PROGRAMMING CLUB, IIT KANPUR · 📷 LIFE-IITK

IIT Kanpur

May 2019 - Jul. 2019

- Developed a unified web app for activities, updates and personal scheduling including individual academic and non-academic student-body updates on campus
- Front-end developed using ReactJS for web-app and React Native for mobile app

## Envy-free Hostel Room Allocation App

COURSE PROJECT UNDER PROF. SWAPRAVA NATH · FAIR RENT DIVISION

IIT Kanpur

Feb. 2019 - Apr. 2019

- Developed an application to find a fair and envy free room and price allocation for a hostel.
- Implemented the Hungarian Algorithm to find a maximum weighted bipartite matching using Python libraries.
- Based on an algorithm implemented on Spliddit which yields the same results as the application developed.

## AirHockey

PROJECT FOR COMPUTER SCIENCE, AISSE 2018 · AIRHOCKEY

Bangalore, India

Sep. 2017 - Nov. 2017

- Developed the game Air Hockey using pygame in Python.
- Incorporated friction as a component to enable user to play against computer.

## Skills

**Languages** Python, C, C++, Java, Javascript

**Libraries** Tensorflow, spaCy, NumPy, pandas, pygame

**Web** ReactJS, NodeJS, MongoDB, ExpressJS, Ruby on Rails

**Utilities** Git,  $\text{\LaTeX}$ , MATLAB, GNU Octave

## Relevant Coursework

Microelectronics<sup>i</sup>

Control System Design and Analysis<sup>i</sup>

Signals, Systems and Networks

Introduction to Power Systems

*i: Ongoing*

Probability and Statistics<sup>i</sup>

Linear Algebra

Ordinary & Partial Differential Eqns

Real & Complex Analysis

Foundations of Cognitive Science

Bilingualism<sup>i</sup>

Language and Society

Introduction to Literature<sup>i</sup>

## Positions of Responsibility

2019-20 **Student Guide**, Counselling Service

2019-20 **Academic Mentor**, Counselling Service

2019-20 **Secretary**, Programming Club

2019-20 **Secretary**, English Literary Society

2015-16 **House Vice Captain**, Baldwin Girls' High School

IIT Kanpur

IIT Kanpur

IIT Kanpur

IIT Kanpur

Bangalore, India

## Miscellaneous

- Efficiency Trophy for Rank 1 overall (grades 5-10).
- Conducted an orientation session in Goldman Sachs as a panelist as a representative of the Technovation Alumni.
- State level Gold Medal in Roller Skating (Andhra Pradesh, 2008).
- Participated and won numerous quizzing competitions, such as Derek's Faster, Smarter, Better Challenge and Times NIE Quizomania.