

# DEBASHISH REANG

Third Year Undergraduate Student  
Department of Electrical Engineering  
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## EDUCATION

**Indian Institute of Technology Kanpur** *July 2017 – June 2021 (expected)*  
*B.Tech in Electrical Engineering, CPI: 6.9/10.0*  
*Relevant Coursework:* Machine Learning, Data Structures & Algorithms<sup>i</sup>, Bioinformatics & Computational Biology, Probability & Statistics, Linear Algebra, Digital Electronics, Complex Variables *i: Ongoing*

**NPS International School Guwahati** *June 2015 – June 2017*  
*All India Senior School Certificate Examination (AISSCE), Marks: 95.6/100.0*  
**Rank: 1<sup>st</sup> in Science Stream**

**Saint Arnold's School** *Jan 2010 – June 2015*  
*Madhyamik Pariksha (TBSE), Marks: 84.0/100.0, Rank: 2<sup>nd</sup> in School*

## SCHOLASTIC ACHIEVEMENTS

**National Scholarship for Higher Education** *2018, 2019*  
**Merit-cum-Means Scholarship IIT Kanpur** *2017*  
**Dr. B.R Ambedkar Merit Award** *2015*

## EXPERIENCE

**Parallel Computing Lab** Kanpur, UP  
*Undergraduate Researcher · Advisor: [Prof. Preeti Malakar](#)* *May 2019 – Dec 2019*

- Studied the Weather Research Forecast Model (WRF) for weather simulation and attempted to visualize it
- Refactored VisIt source code to efficiently visualize the WRF output data. VisIt is a popular software for visualizing weather data, developed by the Lawrence Livermore National Laboratory, USA

**Laboratory of Neural Systems** Kanpur, UP  
*Software Developer* *Dec 2019*

- Wrote scripts to suggest similar posts on [treadwill.org](https://treadwill.org), a platform to help people with anxiety, depression etc.
- Used tf-idf and Support Vector Machine (SVM) classifier to suggest similar posts based on content and title

## PROJECTS

**Galaxy Puzzle Hunt 2020** *Feb 2020*  
*Independent Project*

- Wrote & self-hosted **the first** online Puzzle Hunt during the annual cultural competition Galaxy 2020
- More than 100 students from 5 different undergraduate hostels stayed up all night solving the puzzles
- Used Flask as the framework, PostgreSQL for the database, and self-hosted using Nginx on Ubuntu 18.04

**Machine Learning for Lattice Generation for Physics** *July 2019 – Nov 2019*  
*EE392A: Undergraduate Project · Advisor: [Prof. Vipul Arora](#)*

- Generated new lattices using Convolutional Neural Nets that corresponded to the thermodynamic trends as observed in lattices generated using standard Monte Carlo simulation at lower temperatures
- Generated the train and test datasets & used PyTorch extensively for implementing the neural nets

## TECHNICAL SKILLS

**Languages:** Python, C, Octave **Frameworks:** PyTorch, TensorFlow, NumPy, SciPy, Flask

## COMMUNITY SERVICE & LEADERSHIP

**Coordinator, Quiz Club IIT Kanpur** *Apr 2019 – Apr 2020*  
**Core Group Member, Vox Populi IIT Kanpur** *Apr 2019 – Apr 2020*  
**Academic Mentor & Student Guide, Counselling Service IIT Kanpur** *2018 – 2019*