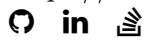


# Kartikey Singh

<https://kartikay-singh.github.io/>



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## EDUCATION

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- **Indian Institute of Technology (BHU)** Varanasi, IND  
*Bachelor of Engineering in Electronics: (9.17/10.0)* July 2016 - July 2020

## EXPERIENCE

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- **Melopond Online Radio** Varanasi, IND  
*Software Development Intern* Sep. 2019 - Jan. 2020
  - Engineered backend and songs feature extraction methods for the AI-based online radio station startup.
  - Used AWS S3, Flask, MySQL, Collaborative filtering.
- **Samsung Research Institute Bangalore** Bangalore, IND  
*Summer Intern* May 2019 - July 2019
  - **Device Services Team:** Developed a robust log files error classification and analysis system and received pre-placement offer from them.
  - Used Python, MySQL, Pandas, Multiprocessing, Regex.
- **Indytech Technologies** Noida, IND  
*Web Developer* Dec. 2017
  - Rebuilt their website for visually appealing display of their products.
  - Used HTML5, CSS, Google maps API and deployed on Heroku.

## PUBLICATIONS

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- **Personalized Diversification in Recommendation Systems: A Cluster Based Approach**  
*Naina Yadav, **Kartikey Singh**, Anil Kumar Singh*
  - Worked with Associate Professor Anil Kumar Singh to develop a novel method to increase diversity in recommendations.
  - Currently submission under review in **Applied Soft Computing journal**.

## PROJECTS

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- **Third Position in HCL Lucknow AI Hackathon |LINK** Nov. 2019
  - Built a complete product under 24 hours working in a team of four to build a biased free source of news and used automatic topic assignment and ranking for it.
  - Used Twitter APIs, Topic modelling(LDA), Flask, ReactJS.
- **Replicating-SeER |LINK**
  - Replication of SeER: An Explainable Deep Learning MIDI-based Hybrid Song Recommender System in TensorFlow2.
  - Provided first publicly available copy of their dataset and code.
- **Vote for Change |LINK**
  - Created a polling website where users can poll on their topic of interest after signing up and shows statistics and graphs of the resulting poll to users.
  - Part of the code.fun.do hackathon and used Django, jQuery for it.
- **Orthographic Languages Similarity Measurements |LINK**
  - Extracted similar words between Orthographic languages along with their distance by using provided corpora with the help of Longest Common Substring (LCS), n-gram and DICE algorithms.
  - Part of CSE-443 (Natural Language Processing) coursework, received grade A for it.
- **Automated Direction Detecting Bot |LINK**
  - Created a wireless bot that processes an image and traverses according to the direction detected by it.
  - Used VGG-19 architecture to develop the CNN model and part of final year project for bachelor's degree.
- **Recommendation System:** Music and Movie recommender systems using collaborative filtering on public datasets.

## POSITIONS OF RESPONSIBILITY

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- **Member of Technex-18 Technical Team**

- Developed a scalable/modular web application for the tech fest of IIT(BHU) (used by more than 15k participants), solved various tech-related issues throughout the year.

- **Web Developer for Institute Day Portal**

- Created a web application, working in a team for the Institute Day of IIT(BHU) used by 150 students at the institute to present their projects.

## PROGRAMMING SKILLS

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• **Languages:** Python, C++, Javascript, SQL

**Technologies:** Pandas, TensorFlow, Django, Git, AWS

## ONLINE COURSES

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- Algorithmic Toolbox • Data Structures • Front-end Development • Machine Learning
- Applied Data Science with Python specialization

## EXTRACURRICULAR ACTIVITIES AND ACHIEVEMENTS

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- Part of the Electronics department football team at IIT(BHU).
- Secured second position in Fine Arts Marathon held in Aagman-16.
- Achieved rank 6147 among 0.18 million students that gave JEE Advanced 2016.
- Cleared National Science Examinations in Physics 2016 and was among top 10% of all candidates.