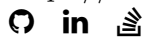# Kartikey Singh

https://kartikey-singh.github.io/

kartikey.singh.ece16@iitbhu.com

+91-955-417-0826

 in

EDUCATION

- **Indian Institute of Technology (BHU)** — Varanasi, IND
  Bachelor of Engineering in Electronics: (9.20/10.0) — July 2016 - July 2020

EXPERIENCE

- **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

- **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

- **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.
  - Achieved low variation with respect to original paper statistics.

- **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

- **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

- **Languages**: Python, C++, Javascript, SQL   **Technologies**: Pandas, TensorFlow, Django, Git, AWS

Online Courses

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

Extracurricular Activities and Achievements

- 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.