kartikey.singh.ece16@iitbhu.com



EDUCATION

• Indian Institute of Technology (BHU)

Bachelor of Engineering in Electronics: (9.17/10.0)

Varanasi, IND

July 2016 - July 2020

EXPERIENCE

• Melopond Online Radio

Varanasi, IND

Sep. 2019 - Jan. 2020

Software Development Intern

• 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.
- $\circ\,$ 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.
- o 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.
- o 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

 \circ 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 Technology

Technologies: Pandas, TensorFlow, Django, Git, AWS

Online Courses

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