

# Bhabaranjan Panigrahi

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## SUMMARY

I am a Computer Science Graduate student specializing in Machine Learning. I have 4 years of industrial experience in Backend Development. Currently, seeking internship opportunities in the field of Machine Learning and Data Science.

## EDUCATION

- George Mason University** Fairfax, VA, USA  
*Master of Science in Computer Science* Aug 2022 - Dec 2023
- Veer Surendra Sai University of Technology** Burla, OD, IN  
*Bachelor of Technology in Information Technology* July 2014 - July 2018

## RELEVANT COURSEWORK

Theory and Application of Data Mining, Introduction to Artificial Intelligence(AI), Analysis of Algorithms.

## TECHNICAL SKILLS

Python, C++, Tensorflow, SQL, NoSQL, Kafka, Docker, Google Cloud Platform.

## AREAS OF INTEREST

Machine Learning, Deep Learning, Computer Vision, Natural Language Processing, Multi-modal Learning.

## PROJECTS

### Drug Discovery: [@github](#)

- Used **Adaptive Boosting** to handle imbalanced datasets and enforced **Neural Networks** to learn weights for minority class based on previous misclassification. Able to outperform standalone Neural Network by **4.2%**.
- Implemented **Decision Trees** to classify **active** and **inactive** compounds using their **molecular structure** sequence. Used pre and post-pruning techniques to avoid overfitting.
- Used statistics to compute **Entropy** and **Gini-index** to determine optimal splitting. Experimented with **Pre-pruning** and **Post-pruning** to avoid over-fitting. Achieved overall **F1-score** of **85.7%**

### Review Classification: [@github](#)

- Implemented **K-Nearest Neighbor** model with a subset of features using **chi-square** and **information-gain** to classify review sentiments.
- Used **PCA** to reduce dimension of data, experimented with **distance metrics** and **hyperparameters** for accurate mapping of clusters.
- Achieved an increase in accuracy by **3.2%** using **Supervised Weights** and achieved overall accuracy of **89.4%**

## EXPERIENCE

**Kroger** Bengaluru, KA, IN.  
*Senior Software Engineer* Jul 2020 - Jun 2022

- Dynamic Configuration:** Implemented a new module to incorporate configuration changes at run time without restarting the application.
- API Migration:** Migrated several use-cases interfacing core services to Node.js, with reduced response time.
- Continuous Integration:** Added multiple workflows in Gitlab to filter pull requests based on set threshold criteria.

**Greenroom** Bengaluru, KA, IN.  
*Software Engineer* Nov 2019 - Jun 2020

- Data Ingestion:** I was closely involved in ingesting user events and written scripts for batch processing.
- Data Scraping:** Implemented a service to scrape public data at scale from various blogging/social-media platforms and added auto-recovery from blocked IP.
- Data Visualization:** Created interactive Map and Graph visualizations using Deck.gl and react-vis to monitor user activity.
- Containerization:** Changed traditional docker build to two-stage docker build and reduce image size by half.

**StackRoute Labs** Bengaluru, KA, IN.  
*Software Engineer* Aug 2018 - Oct 2019

- Events for APM:** Added telemetry events to plugins to help the Analytics team to generate data-driven insights.
- Plugin development:** Contributed to optional and default application plugins to help onboard new clients.

## ACCOMPLISHMENTS

- Global rank **1046** in **Code Chef Long Challenge** June 2017 out of more than 10,000 participants
- Semi-finalist of **Techgig Code-Gladiator** coding competition **2018** and **2017**.