

## Pranav Kotak

Buffalo, NY | pranavki@buffalo.edu | +1 716 572 7083 | <https://www.linkedin.com/in/pranavkotak/>

### EDUCATION

**University at Buffalo Aug 2022 – Dec 2023 *Master of Professional Studies in Data Sciences and Applications***

**Relevant coursework:** Statistics & Probability, Data Mining, Database Management Systems, Data Management and Design

**Mukesh Patel School of Technology Management & Engineering, India Jul 2018 - May 2022 *Bachelor of Technology in Data Science* GPA: 3.96/4.0** **Relevant coursework:** Programming in C++, Data Structures and Algorithms, Machine Learning, Deep Learning, ETL, Big Data, Data warehousing, and Mining

### TECHNICAL SKILLS

**Programming Languages:** C, C++, Java, SQL, Python, JavaScript, MATLAB, R

**Machine Learning:** Scikit-learn, Pandas, OpenCV, TensorFlow, PyTorch

**Software & Tools:** MS Excel, SAS, Tableau, Google Analytics, Android Studio, MongoDB, PostgreSQL, Airflow, NLTK, PowerBI

**Web Technologies:** HTML, CSS

**Certifications:** Machine Learning with Python (IBM)

### PROFESSIONAL EXPERIENCE

**Bangalore, India Nov 2021 – May 2022 *Great Learning – Data Scientist Intern***

- Conducted data analysis on 200 students' data from 5 internal courses in 5 distinct programs to design a new course that includes practical application of the tool Airflow. Research for specific courses included an analysis of tool's existing demand, integration with other tools, and reusability.
- Maintained content for internal documentation and knowledge sharing.
- Contributed to designing 4 case studies and 1 capstone project from start to finish in Airflow, each requiring creation of fresh data.

**SIGNZY Technologies, Mumbai, India Apr 2021 – June 2021 *Business Analyst Intern (Python (sklearn, pandas, and SciPy for mathematical operations), MySQL)***

- By combining several database tables, one million rows of raw user data were transformed into usable data (data processing).
- 7 Tableau dashboards were created for various scenarios to better analyze user behavior over a brief period.
- Worked in depth with data to get some basic statistics (5-number summary) about it.

### ACADEMIC PROJECTS

**Text Generation Portal (Python, NLTK, sklearn, HTML, CSS) Jan 2021**

- A web application that accepts beginning of a text as input and forecasts its continuation based on the user-specified number of words to predict next.
- Made a customized LSTM model with a ROUGE score of 0.86 and test accuracy of 90%.

**Audio Analytics (Python, R, PyPI) Dec 2020**

- Developed a Python module that takes an audio file as an input and outputs the emotion in given audio. • Used python libraries to analyze different audio parameters.
- Built a 1D CNN model that performed better than the 2D CNN models already in use and provided an accuracy of 80%.

### RESEARCH

**Unmasking Privacy Leakage through Android Apps Obscured with Hidden Permissions IEEE - Dec 2021**

- 500 Android apps were categorized into low, medium, and high-risk categories using a novel algorithm based on hidden and dangerous permissions.
- To create the risk metric score for apps, a technique based on linear regression was applied.
- Method was verified using K-means clustering to match the app permissions' original data. To correlate the results, 3 separate clusters were created.

**Enhancing the Data Mining Tool WEKA IEEE - Oct 2020**

- Developed 3 strategies to get around WEKA's main flaws.
- The CSV to XLSB file format conversion has been tested in experiments to validate the methodologies; it is a big change.