# Pankhuri Kumar

pankhuri.kumar@columbia.edu · (206) 209-9928 · www.linkedin.com/in/pankhuri-kumar/

## EDUCATION

#### Columbia University

New York, NY

Dual M.S. Computer Science and Journalism GPA: 3.66 (current)

Aug 2017 - May 2019

Courses: Analysis of Algorithms, Advanced Machine Learning for Personalization, Databases, Artificial Intelligence, Data Visualization, UI Design, Computational Journalism

**BITS** Pilani B.E. Computer Science and M.Sc. Mathematics GPA: 8.1/10

Rajasthan, India Aug 2012 - Jul 2017

#### EXPERIENCE

## **Pew Research Center**

Washington, D.C.

Google News Initiative Fellowship Recipient

Jun 2018 - Aug 2018

- Developed and tested internal organization-wide pipelines for data collection and storage from the Twitter and Census API, using Python and Django.
- Assisted in survey design, analysis of response data for lead findings and drafting a report about public opinion on social media bots (report here).

**GE** Digital Bangalore, India Digital Intern Jan 2017 - Jun 2017

- Augmented dashboard with asset data visualization to improve visibility for project managers using Javascript, HTML & CSS.
- Re-configured a job scheduler to match business unit requirements, improved on-time delivery by
- Analysed and suggested methods to improve product quality by 15% by studying factors affecting textile production.

## Quadratic Insights

Hyderabad, India Jun 2015 - Jul 2015

Software Intern

- Developed a tool prototype that helps businesses grow by exploring customer behavior over social media platforms like Twitter & Facebook.
- Worked with REST APIs to aggregate public information about customers.
- Adapted Python Natural Language Toolkit and Stanford Named Entity Recognizer to analyze posts and recognize customer interests.

# Projects

## Fairness in Machine Learning Python, HTML/CSS, D3

An interactive visualization to explain the conflicting nature of fairness definitions in machine learning, using ProPublica's data and methodology from the story Machine Bias (project here).

# Ocktave: Music Feature App Flask, Python/Spotipy, Google Firebase

A music recommender based on technical attributes, like tempo and frequency, to cater to dancers and music students. Built with adherence to rigorous testing and continuous integration (app here).

#### Hybrid Variational Autoencoder for Collaborative Filtering Python

Published a paper in RecSys KTL on modified variational autoencoder to enhance user-movie recommendations by combining movie enbeddings from IMDb with user ratings from the MovieLens 20M dataset (link to paper).

## India's Case for Women Empowerment P5, HTML/CSS, Mapbox

A data story using National Family Health Survey-4 to argue the importance of women literacy, awareness and empowerment in lowering infant mortality rate in India (project here).

# SKILLS

Python, C/C++, JavaScript, HTML/CSS, R, MATLAB Programming Languages:

Databases: MySQL, PostgreSQL

Google Cloud Platform and analytics, P5, D3, Mapbox, Leaflet Tools & Technologies:

## Awards

GE Digital Interns Hack-a-thon Second place in hackathon for interns May 2017 Inspire Scholarship, Govt. of India Awarded to top 1% of all high school students 2012 - 2017 CBSE Merit Certificate, Govt. of India High school, 99.9 percentile in Physics May 2012