

EDUCATION

Columbia University, New York, NY

Dec '21

Master of Science in Chemical Engineering, GPA- 3.6/4.0

Thesis: Investigation of three beads magnetic swimmer for the controlled active colloidal system

Courses: Hedge Funds, Capital Markets and Investments, Corporate Finance Restructurings and LBOs, Data Analysis, Mathematical Methods and Modeling, Statistical Computing, Genomic Technologies, Design Justice

Honors: Summer Institute on Sustainability and Energy Fellow (University of Illinois), Columbia Build Lab Fellow

Certifications: Securities Industry Essentials (FINRA), Bloomberg Market Concepts

Manipal University, Manipal, India

Bachelor of Technology in Chemical Engineering, Minor in Business Management

SKILLS

Soft - Python, R, SQL, C++, Excel/VBA, PowerPoint, LaTeX, Git, MATLAB, Tableau, Linux, SAS, Power BI

Packages - Numpy, Scipy, Pandas, Seaborn, Matplotlib, Spacy, NLTK, RegEx, Scikit-learn, Keras, TensorFlow

Other Spoken Languages - Marathi (Professional), Hindi (Fluent)

Research Methods - ETL, A/B Testing, Multivariate & Logistic Regression, Monte Carlo, K-Means clustering

EXPERIENCE

SAFELab at Columbia School of Social Work, New York, NY

May '21 - Present

Data Scientist (Part-time)

- Reconstruct - 34 GB of unstructured HIPPA data of over 20 million clinical notes - working with team of five
- Lead data cleaning, data frame reconstruction, risk factor analysis for human-generated notes and audio
- Utilized supervised learning to label- and text mine -medical records to locate instances of child abuse and neglect
- Analysis of text and audio outputs from the simulation, natural language processing, sentiment analysis
- Apply clinical software - Nimbleminer with high probable data to interact with word embedding - lexicons
- Assist in programming and lead a live coding in AI4ALL program, lead jointly with Data Science Institute
- Strategize and assist development of a clinical simulation tool "InterpretMe"
- Lead in maintaining web-based tool InterpretMe with the react-Heroku framework
- Maintained and upgraded infrastructure as needed via a partnership with MIT Teaching System lab

Tough Leaf, New York, NY

Sept '21 - Present

Lead Data Scientist (Fellowship)

- Apply NLP to condense and convert over 10138 technical public data entries into actionable human-friendly form
- Collaborate with cross-functional teams to draft RFP for Empire State - Minority-Owned Business initiative
- Develop data cleaning algorithms to format and restructure data for front-end display at [Toughleaf.com](https://toughleaf.com)
- Notebook/Code - <https://jovian.ai/paritoshk/toughleaf-nlp-data-reconstruction>

Columbia University/Manipal University

Researcher (Academic-credit)

Aug '17 - Nov'21

- Quantitatively investigate and model 'bioinspired' particle swimming motion in time-varying magnetic fields
- Design and fabricate nanoparticles via lithography and analyze nanoscale videos
- Optimize pipelines for time series analysis by automating image processing and feature tracking
- Notebook/Code- paritoshk/shapcecep-updated, Research Publications - [Paritosh Kulkarni](https://paritoshk.github.io) (google scholar)

PROJECTS

- **Analysis of fund performance in time series-** <https://jovian.ai/paritoshk/convergence>
- **Application of NimbleMiner- NLP for clinical application** - <https://github.com/paritoshk/NimbleMiner>
- **Predictive models for emerging - Cannabis Industry** (presentation - link)