Shivam Badkas

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EDUCATION

University of Toronto | Honours BSc. Double Major in Statistics and Global Health

Vice-President, Veg Club: Leader of a student group with 14 executive members and 1000+ general members **EXPERIENCE**

Data Analyst 2022 - Present

Liferoll | Toronto, Canada

- Created event tracking graphs, funnels, and models on MixPanel to visualise metadata from ~600 test clients
- Designed and analysed experiments to validate hypothesis for product to improve user engagement and retention
- Plotted and analysed trends to better understand user experience, diagnose flaws of tracking framework and create a list of recommended events to track, gain critical insight into fundamental drivers of user behaviours
- Prepared experiments around group games to optimise for the best games/highest engagement games feature to incentivize group chat activity which doubled stickiness (DAU/MAU) from 16% to 28%
- A/B tested group rolls feature which improved user engagement by 13% which overall drove user retention by *1.09, feature came to be fundamentally core to the product
- Coordinated task backlog with engineers across the stack in order to get the right analytics events tracked
- Provided oversight on analytics projects, utilised user feedback to provide recommendations to designers, created dashboards and reports for leadership, collaborated with engineers to ensure integrity of data pipeline

Data Analyst June 2020 - Dec 2020

GoalMogul | Toronto, Canada

- Created event tracking graphs, funnels, and models on Amplitude to visualise metadata from ~100 test clients
- Managed product analytics dashboard on Asana to create and organise tables which held detailed descriptions of product user tracking events and to organise analytics objectives and goals
- Added topics feature to improve user engagement by 11% which drove overall weekly user retention by 6%

Research Assistant June 2018 - September 2018

Stony Brook University, Shah Lab | New York, United States

- Co-authored "Comprehensive investigation of forelimb kinematics during overground locomotion in non-injured rats"
- Tested eleven live rat models on MotoRater to quantify gait cycles and determine baseline performance which allowed for comparison to post-treatment tests
- Analysed collected data in SIMI Motion Analysis to determine patterns of locomotion and interpret results of ~10 parameters which were present in the final paper

PROJECTS (2022)

Feature Selection for Diagnosis: Using tumour dataset; determined which predictors were significant using visualisations, recursive random forests, SelectKBest, Recursive Feature Elimination, then used PCA for feature extraction

Classification of Disease using sklearn and pandas: Used Decision Trees, Logistic Regression, K-NN, and Random Forests to classify presence of disease. Used train_test_split to separate training data and used ROC curve/AUC to evaluate models

Prediction of Medical Insurance Charges by Regression: Predicted medical insurance costs of families by multiple predictors using linear regression, L1 and L2 regularisation using ridge and lasso regression, and random forest regressor

Dimensionality Reduction using PCA and t-SNE: Standardised MNIST 28x28 hand-written digit dataset and used PCA to find number of principal components that explain variance, then used t-SNE to visualise how local structure is preserved

Classification with XGBoost: Predict probability of child being accepted into nursery based on socioeconomic factors using data from 1980s Slovenia; tuned hyperparameters, k-fold cross validation, and ranked feature importance

SKILLS

- Data Science: R, ggplot, dyplr, INLA, Python, pandas, numpy, matplotlib, sklearn, MySQL, BigQuery, HTML/CSS
- Technologies: AWS, Git, Excel, Amplitude, Unix, Jupyter, Tableau, PowerBI
- Certifications: Google Data Analytics Professional