Barinder Thind

Senior Data Scientist



Senior Data Scientist | Later | August 2023 - Now

- > Significantly improved the influencer marketplace search model (doc2vec + HuggingFace + GPT) allowing customers to find people through a combination of natural language and image prompts increasing user search queries by 15%
- > Applications of the **simplex** method to identify best allocation of client marketing spend on influencers; pending production
- > Developed **proprietary** method to detect trending hashtags
- > Topic modelling via an ensemble of Latent Dirichlet Allocation models

Data Scientist | Later | August 2021 - July 2023

- > Key contributor during due diligence process for \$200M acquisition
- > Hired entire data team including manager, analysts, and interns
- > Launched hashtag suggestions model with 10k+ daily invocations
- > Deployed models via Docker, python libraries, and Sagemaker
- > Productionized caption based suggestions model (YAKE + word2vec)

Deep Learning w/ Functional Inputs | Publication | June 2022

- > A novel contribution to advance neural network architectures
- An R Package (FuncNN) developed on top of the TensorFlow architecture (11000+ downloads)
- > View Paper published by Journal of Computational & Graphical Statistics (H-Index: 94)
- > View R Package Publicly available through CRAN

Data Analyst | Later | July 2020 - July 2021

- > Company wide financial and customer forecasting (ARIMA, Prophet)
- > Primary source for validation on A/B testing and experimental design
- > RShiny and Flask applications for internal machine learning servicing
- > Analyzed customer behaviors affecting onboarding (setup, aha, habit moments), proposed changes, and cut new customer churn by 15%

Selected Projects

Begin NLP - View Project

- Meant as a public resource; this is an exhaustive primer on all classic + modern natural language processing (NLP) techniques
- > A completely solo undertaking; written in JS React

AstroML - View Project

- > A full-stack effort to create an ML based finance application
- > Took care of front-end, back-end, design, model deployment, etc.
- > Currently offline but you can view a summary in the link above

Education

Simon Fraser University MSc. Statistics GPA: 94%; April 2020

Simon Fraser University BSc. Honours Statistics UGPA: 89%; April 2018

3 Amazon Web Services Machine Learning Specialty April 2022

Skills

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Scripting

R, Python, SQL, Ruby, HTML, CSS, JavaScript, MATLAB, \(\text{PT}_EX \)

Cloud

AWS (SageMaker, Lambda, S3, etc.), Google Cloud (Gemini, BQ, GCE, etc.), Git, dbt, Jupyter, Spark

III Tools

Mode, Tableau, Google Data Studio, Amplitude, Notion, Asana, Jira, Zendesk

♥ Frameworks

Tensorflow/Keras, Torch, Flask, React, Sinatra, Gensim, Hugging-Face, Dplyr, Docker, RShiny

Awards

Top Statistical Research Award Statistical Society of Canada May 2020

Graduate Researchship Dept. of Statistics @ SFU May 2020 | \$6500

Graduate Fellowship Dept. of Statistics @ SFU Jan 2020 | \$6500

Big Data Graduate Scholarship Dept. of Computer Science @ SFU Sep 2019 | \$6500

KEY Big Data USRA Dept. of Computer Science @ SFU May 2018 | \$6000

