Barinder Thind

Senior Data Scientist

Work Experience

Senior Data Scientist | Later | Since August 2023

- > Improved the influencer marketplace search model (doc2vec + Hugging-Face) allowing customers to find people through a combination of natural language and image prompts increasing the number of user search queries by 15%
- > Appled **convex optimization** methods 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

- > Contributed during due diligence process for \$200M acquisition
- > Hired 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)

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 17%

Projects & Publications

Deep Learning w/ Functional Inputs - View Publication

- > A novel contribution to advance neural network architectures
- > Published by Journal of Computational & Graphical Statistics (H-Index: 94)
- > Published: July 2022; Citations: 17

FuncNN - View R Package

- > An R Package developed on top of the Tensorflow architecture
- > Released: September 2020; Downloads: 11000+

NLP Begin - View Website

- 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

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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, LETEX

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