Vijith Jacob Poovelil, Ph.D.

Data Scientist

Salt Lake City, UT, 84102 | (801) 859-3565 | vijith.jacob93@gmail.com | linkedin.com/in/vijith-jacob-poovelil
github.com/vijithjacob93

SUMMARY

- 3 years experience as a Data Scientist in the fintech industry, building, maintaining, and improving key business systems and predictive models
- 4 years of experience as a Data Scientist in academia with a Ph.D. in Physics, applying statistical techniques and machine learning algorithms on big data
- Track record of translating business questions into data science solutions and communicating to business stakeholders
- Strong programming skills in Python, R, and SQL
- Minor in Math, with a strong base in statistics and analytics

EXPERIENCE

Data Scientist
- Arivo Acceptance, West Valley, UT — March 2024 - current
- Progressive Leasing, Draper, UT — August 2021 - March 2024

Recommend and support strategic business changes through rigorous analytics, creative problem solving, and critical thinking.

- Experiments and Hypothesis Testing: Conceived the idea for, designed, and implemented in-market experiments to optimize customer contact strategies, driving a combined incremental revenue of $10MM
- Machine Learning and Modeling: Built and deployed the following machine learning models from end to end (data collection, feature engineering, model selection, training, validation, and deployment)
  - Uplift random forest models to delay outbound calls to delinquent customers, reducing call costs by 20% and increasing NPS by 10%
  - Xgboost propensity to pay model to predict the likelihood that a customer makes a payment on a given day, improving customer response rate by 20% and resolutions by 10%
  - LSTM delinquency drift forecasting model to identify accounts most likely to deteriorate within the next month, reducing overall portfolio delinquency by 2%
- Data Mining and Automation: Revamped the structure of rebate data using automated pipelines to creatively solve redundancy issues including a user-friendly app for stakeholders to seamlessly update data and reduce time spent on repetitive tasks
- Communication and Impact: Thrived in fast-paced and innovative environments with cross-departmental stakeholders summarizing business updates using effective visualizations and presentations, highlighting excellent communication skills

Researcher-Ph.D. — August 2016 - May 2021
- Department of Physics, University of Utah, UT

- Designed a novel data-driven pipeline that estimates accurate uncertainties for chemical properties in stars utilizing Bayesian techniques like maximum likelihood and kernel density estimation, and machine learning techniques like Naive Bayes classification and k-means clustering[1]
- Quantified the variability of light from stars using time series analysis techniques like Lomb-Scargle periodogram and damped random walk model[2]
- Documented the detailed statistical and modelling techniques utilized in a data-driven research projects across multiple manuscripts[1,2,3], highlighting excellent written communication skills

TECHNOLOGY SKILLS

Software Expertise:

- Python
- R
- SQL
- Git
- Snowflake
- dbt
- PyCharm

Statistical Expertise:

- Machine Learning
- Hypothesis Testing
- Predictive Modeling
- Time Series Analysis
- Deep Learning
- Bayesian Statistics

EDUCATION

Ph.D., Physics and Astronomy University of Utah, Salt Lake City, UT
Exploring Galactic Chemical Evolution Using Cluster Chemistry and Variability,
Bachelor of Science (BS) MS Dual Degree, Major: Physics, Minor: Math
Indian Institute of Science Education and Research, Thiruvananthapuram, India

PUBLICATIONS

[1]Poovelil et al., 2020: ApJ 903 55
[2]Wainer, ... , Poovelil, et al., 2023: AJ 166 106
[3]Jönsson, ... , Poovelil, et al., 2020: AJ 160 120

LANGUAGES

English	Fluent
Malayalam	Fluent
Hindi	Intermediate
French	Learning

INTERESTS

Soccer, board games, and fixing up old motorcycles