

Harsh Kumar

eharshkmr@gmail.com | +91 886 039 4423 | [in harsh-kumar-a7b98198](https://www.linkedin.com/in/harsh-kumar-a7b98198) | [harshcurious](https://github.com/harshcurious) | Website: harshcurious.com

SKILLS

Languages: Python, C, Go

ML Libraries: Pandas, Numpy, scikit-learn, XgBoost, fbprophet, TBATS, statsmodels, SHAP, NLTK, spaCy, PyTorch, Keras, TensorFlow, Transformers

Data Technologies: PostgreSQL, MySQL, Snowflake, MongoDB, PySpark, Polars

Cloud Technologies: AWS Sagemaker, S3, EC2, Step Functions, Lambda Functions

Development Tools: Git, Docker, Kubernetes, Jenkins, Github Actions, Bash, PowerShell

Others: HTML/CSS, Jira, Confluence, \LaTeX , Markdown

WORK EXPERIENCE

DATA SCIENTIST | ZESTMONEY

Bangaluru, KA, IN | Feb 2022 – Current

- **Volume Projection**

- Designed a statistical time series using that improved the daily call volume prediction by 400%.
- Iterations included algorithms like ARIMA, SARIMA, fbprophet, and TBATS.
- Coordinated with the customer relations team to optimize the employee work hour allotment resulting in increased customer satisfaction rate.

- **EMI Estimation**

- Performed data cleaning and segmentation on a large dataset to get a better estimate of EMI obligation for our customers.
- Researched market data to improve the data quality.

- **Fraud Likelihood Estimation**

- Performed extensive experimentation to produce a new fraud detection model.
- Improved the previous performance by approximately 20%.
- Wrote the production code to calculate the fraud likelihood in real time.
- Introduced SHAP feature importance for model assessment to the data science and risk analysis teams.

- **Model Monitoring**

- Helped create the model monitoring framework for all the deployed model at Zestmoney.
- Produced data visualization to help other teams to track model performance.

- **Collections Models**

- Took ownership of multiple models used to optimize collections. Created detailed workflows to manage loan collection strategies.
- Used the model monitoring data to proactively improve the model performance.

- **AutoML**

- Helped in building of an internal ML platform for automatic modelling of internal financial data.
- Helped build the ELT pipeline in Polars for feature building which improved the latency by 40%.

TEACHING ASSISTANT (TA) | UNIVERSITY OF MISSOURI-COLUMBIA

Columbia, MO, US | Aug 2018 - Dec 2019

- Taught problem solving skills to pre-calculus and calculus I students.
- Performed one-on-one mentoring with students during office hours.

EDUCATION

B.S. in Mathematics and Scientific computing

Kanpur, India | Jul 2012 — Jun 2016

INDIAN INSTITUTE OF TECHNOLOGY KANPUR (IIT KANPUR)

GPA 8.4

Coursework: Fundamentals of Computing; Data Structures and Algorithms; Probability and Statistics; Mathematical Logic; Principles of Numerical Computation; Theory of Computation

M.S. in Mathematics and Scientific computing

Kanpur, India | Jul 2016 — Jun 2017

INDIAN INSTITUTE OF TECHNOLOGY KANPUR (IIT KANPUR)

GPA 9.1