

# ROOPKISHOR SINGH

Goldman Sachs | IIT Roorkee

Contact: roopkishor.iitr@gmail.com | +91-8979094324

## SUMMARY

Enthusiastic and result oriented professional with a keen interest in applications of Data Science. Demonstrated history of applying Natural Language Processing techniques to solve problems in Personal Finance Management(PFM) and Operational Risk.

## EDUCATION AND SCHOLASTIC ACHIEVEMENTS

Program	Institution	%/CGPA	Year
B. Tech (Mechanical Engineering)	Indian Institute of Technology Roorkee	7.7	2018
Class XII (C.B.S.E.)	Central Academy	90.2%	2014
Class X (C.B.S.E.)	Tata Chem DAV Public School	10	2012

## AREA OF INTERESTS

Natural Language Processing, Machine Learning, Data Analytics, Personal Financial Management

## TECH STACK

Python, SQL, R programming, AWS, Docker, Gitlab, Snowflake, Databricks, Tableau

## PROFESSIONAL EXPERIENCE

<b>Data Science Associate</b> Goldman Sachs Bangalore May 2020-Present	<b>Personal Finance Management Models (Fintech App):</b> Developing models and APIs for customer-facing features in Marcus app includes a combination of modelling, development, design and consumer understanding. <ul style="list-style-type: none"><li>● <b>Transaction Categorization</b> - Developed a model for classifying the user transactions into 24 categories like shopping, bills etc. based on the transaction description using a <b>random forest classifier</b> along with a stepwise design to integrate user feedback.</li><li>● <b>Merchant Names Extraction</b> - <b>Extracting</b> clean merchant names from the transaction description using <b>fastText embeddings</b> to prioritize rarely occurring words.</li><li>● <b>Asset Verification Service</b> - Built a model and API to estimate user income which can be used by various lines of business, especially lending.</li><li>● <b>Recurring Expense Identification</b> - Built a <b>Fourier transform model</b> to identify the recurring expenses of a user for customer-facing features, fraud models and disputes.</li></ul>
<b>Risk Analyst</b> Goldman Sachs Bangalore June 2018-April 2020	<b>Operational Risk Models and Metrics:</b> <ul style="list-style-type: none"><li>● Developed the <b>first machine learning model to classify operational risk events</b> to L4 Risk Taxonomy using NLP and other techniques. This model Reduced manual effort by 80% along with the scope for human errors.</li><li>● Designed and Developed automated metrics to track key operational risk indicators of the firm.</li></ul>

## INTERNSHIPS AND PROJECTS

<b>Research Intern - Bobble Keyboard</b> Gurugram May 2017-July 2017	<b>User Feedback analysis System:</b> <ul style="list-style-type: none"><li>● Feedback text analytics collected through various sources</li><li>● Developed a sentiment analysis model using libraries like NLTK, Stanford coreNLP and Text CNN</li><li>● Created a dashboard for key progress indicators based on the text feedback analytics</li></ul>
<b>Industrial Collaboration</b> Swaniti Initiative Mar 2017-May 2017	<b>Predicting treatment, Infant Mortality rate and Maternal mortality rate:</b> <ul style="list-style-type: none"><li>● Swaniti Initiative is a non-profit organization working with the government to improve health standards</li><li>● Developed an <b>ensemble regression to estimate the various mortality Rates</b></li></ul>

## SCHOLASTIC ACHIEVEMENTS

- Secured **1st position in GS Quantify 2017** hosted by Goldman Sachs for 22 top tier colleges in India
- Secured **2nd position in Young Data Science 2017 competition** by ZS Associates
- Secured **1st position in Data Analytics Competition 2017** conducted by Department of Management Studies, IIT Roorkee

## COURSES, GITHUB AND BLOG

<b>Courses</b>	<ul style="list-style-type: none"><li>● Natural Language Processing with Classification and Vector Spaces</li><li>● AWS Fundamentals: Going Cloud-NativeMachine Learning by Andrew NG</li><li>● Github - <a href="https://github.com/thedarkparking">https://github.com/thedarkparking</a>, Medium - <a href="https://medium.com/@roopkishor.iitr">https://medium.com/@roopkishor.iitr</a></li></ul>
----------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## POSITIONS OF RESPONSIBILITY

<b>Secretary</b> Data Science Group IIT Roorkee	<ul style="list-style-type: none"><li>● DSG, IITR is a group of data science enthusiasts who aim towards developing the culture of data science.</li><li>● <b>Lead a team of 22 people</b> and Played an instrumental role in the establishment of the group.</li><li>● Conducted workshops, hackathons, and research paper discussions.</li></ul>
-------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------