# RAMPRAKASH NARAYANAN

# **Data Scientist**



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#### ABOUT ME .....

- Data Scientist with 5+ years of relevant experience and overall 9+ years of experience in the BFSI domain yet open to work in any domain with a suitable position
- Adept in designing, developing, implementing, and maintaining Predictive & Descriptive Analytics solutions as per the business needs
- Predominantly worked on projects related to Marketing, Transaction Screening, Customer Survey Interpretation, Sentiment Analysis, Customer Dormancy Analysis, etc.

# SKILLS.....

Classification / Regression Clustering / Segmentation Data Visualization

Statistics SAS / SQL / Tableau Python



Hadoop / Spark / PySpark Reinforcement Learning Deep Learning / Al



#### EDUCATION.....

# **BACHELOR'S DEGREE / JUN 2007 - APR 2011**

Anna University, India: First class graduate in Electronics & Communication Engineering

### EXPERIENCE -----

# DANSKE BANK / MAY 2015 - JAN 2021 / DATA SCIENTIST

- Facilitated Omnichannel experience in marketing campaigns using digital channels to boost digital channel adaption
- Performed customer segmentation and developed models for mortgage and pension products, leveraging analytics to improve marketing campaign targeting efficiency by 2-5x times.
- Developed a model monitoring framework collaborating with other team members which not only helps in model evaluation but also in measuring ROI benefits and team management.
- Collaborated with internal stakeholders, identifying and gathering analytical requirements to evaluate the ROI of marketing campaigns.
- Worked with representatives of Senior Management from different departments to come up with a data-driven KPI dashboard which was later used to drive the IT Organization of Danske Bank as well as to calculate bonuses of CIOs.
- Worked on POCs related to Sentiment Analysis over Customer Survey, Customer 360 Data platform, Real-time decisionmaking platform for marketing, etc.



Winner in Innovation Challenge 2019 for coming up with the MVP of Customer 360 Data Platform

# BNY MELLON / JUN 2011 - APR 2015 / SENIOR SOFTWARE ENGINEER

- Worked on various mainframe application development/maintenance projects related to Trade processing and clearance
- Acquired expertise in SQL, SAS, data manipulation and aggregation methods which later helped in my career transition



Awarded Star performer of the Quarter twice for contributions towards the project

#### RECENT PROJECTS

# **Multi-Channel Optimization:** (PySpark / Python / SQL )

- Performed exploratory analysis to understand the key metrics influencing customer's channel preference for marketing
- Used clustering algorithms to define customer groups based on metrics like Age, Digital propensity, etc.
- Provided an end to end production solution for the marketing team which is being used to allocate digital channels in product - marketing campaigns

## Classification Algorithms to improve Campaign Targeting: (PySpark / Python / SQL)

- Performed market research to understand the customer's journey w.r.t. mortgage and pension products
- Derived different strategies to target customers with respect to their purchase behavior and life stage
- Explored multiple external data sources to identify additional touchpoints of a customer which were not available in traditional bank's data
- Prepared analytical dataset for each strategy by following Industry's best practices in terms of feature derivation and selection
- Final models have provided a lift of 2x 5x compared to blanket targeting
- Collectively, the models have generated 48% more business volume than the business rule-based campaigns

#### **Identifying drivers of customer satisfaction:** (R / SQL / Tableau)

- Performed thorough exploratory analysis to understand the different variables of the Customer Relationship Survey data
- Reduced the number of variables from 535 to 28 considering missing percentage, project scope, etc. and prepared the analytical data set
- Developed a stable relative importance model by iterating through the different relative importance methods and identified the drivers of customer satisfaction
- Presented the key drivers of customer satisfaction using Tableau and the results were appalled by the Front desk team
- The outcome of this project is utilized by the Customer Insights team to plan their action items towards better customer satisfaction

## **Model Monitoring Framework:** (Python / SAS / Tableau / PySpark)

- Researched model monitoring over different business areas like credit risk, marketing, AML, etc.
- Proposed a baseline framework that measures the model's performance and stability by taking inspiration from the governance structure of Credit Risk models
- Collaborated with team members to come up with a full-fledged monitoring framework for our CRM Marketing models
- The framework not only monitors the model performance but also tracks the models' ROI in terms of business volume
- The framework also servers as a project management dashboard to helps managers/team leads in team management

#### **Performance metrics dashboard:** (Python/ Tableau / SQL / HTML / Javascript / CSS)

- Collaborated with the representatives of 5 different bank's divisions to understand their objectives
- Derived 25 data-driven KPIs as well as a target for each division
- Normalized all the 25 KPIs to a target scale ranging from 0 to 5
- Developed and automated a tableau dashboard that visualizes these 25 KPIs for different divisions
- Developed a one-pager for CEO/COO/CTO to easily track the KPIs performance w.r.t each division
- This dashboard is now used by the bank's senior management as well as team managers to track their performance and drive the business