

# Sai Mounica Gudimella

(224) 666-8879 || mounica500110@gmail.com || <https://www.linkedin.com/in/sai-mounica-gudimella/>

## WORK EXPERIENCE

### Gannett, USA Today Network – Data Scientist, Washington DC

March 2022 – Present

- Leading digital forecasting of subscribers and revenue across 4 products: 230+ Local sites, USA Today, Crossword and Sports+. Improved forecast accuracies by 39% by cross-collaborating with customer retention, offer strategy, pricing and revenue teams, with direct visibility from CFO.
- Building growth projection model for new product (to be launched) using ARIMA, SARIMA, random forest, Facebook's Prophet and neural prophet to forecast growth and determine best offer strategy, pricing, staffing.
- Performed customer segmentation using k-means and DBSCAN on an existing similar product and market analysis to identify demographic behavior of subscribers, registered and anonymous users. Metrics used - clicks, pageviews, content type, average time spent.
- Developing product roadmap for the data science team to identify key deliverables within each workstreams – Content, Audience, Revenue and strategy.
- Ideated and developed a digital command center dashboard to view key metrics – new starts, temporary and permanent stops, volume, transactional net adds, overlays, 4-week outlook to give an overview of the weekly digital subscription performance.
- Built a customer retention model to determine factors affecting churn by querying and transforming data in BigQuery and modeling in VertexAI. Provided recommendations to stakeholders to improve retention by 4% and a profit of ~\$ 0.25M.

### Fifth Third Bank – Business Strategy Optimization Analyst – Cincinnati, OH

Aug 2021 – Feb 2022

- Built bottoms-up model to forecast credit card, Home Equity Line of Credit (HELOC) applications, and accounts, improving accuracy by 18%.
- Performed analysis on large data model to identify customer touchpoints using fractional attribution for credit cards and aligned stakeholders on eliminating spending waste and channeling revenue towards other high-performing channels.
- Optimized the population selection strategy using A/B testing for direct mail campaigns over FICO, marketing costs, mail offer based on ROMI which resulted in 10,000 more customers and increase of about \$9,000 revenue.
- Developed performance portfolio for Direct Auto loan program to determine population and segment over credit normalization, historical behavior, pricing changes, promotional activities, and economic events which improved the finance forecast accuracy by 45%.

### Axcess Financial – Graduate student Analyst - Cincinnati, OH

May 2021 – Aug 2021

- Led a team of 4 (2 data science, 2 information science students) in enhancing the accuracy of an existing risk assessment model by 32% to determine early default of credit card customers using logistic regression, decision tree, gradient boosting, multivariate adaptive regression splines. Performed feature selection to attribute 40% missing values from training data using Information value and Gini correlation, and segmenting customers based on swap in and swap out analysis.
- Created technical design and product development documents to ensure usability of the model by the organization.

### Neo Consulting - Project Analyst - Cincinnati, OH

Jan 2021 – Apr 2021

- Led a team of 6 (4 undergraduate, 2 graduate students) to perform cost-benefit and market analysis for a minority-owned business. Recommended strategic initiatives to determine profitable markets, effective marketing platform, and pricing, boosting sales by 15%.

### Deloitte Consulting India Pvt Ltd. - Business Analyst – Hyderabad, India

Apr 2018 – Dec 2020

- Delivered two Workday projects by organized and leading all the product meetings, reviews for learning and payroll modules. Responsible for writing user stories, product requirements document, development, testing, and release of the product. Negotiated timelines with key stakeholders to accommodate testing schedules. Deployed to Melbourne, AU to lead onsite testing of learning and payroll modules resulting in less than 5% defects across 46 delivered models.

### TIBCO Software - Junior Consultant - India

Jul 2017 – Apr 2018

- Analyzed historical data of 60 campaigns to understand click-through patterns, buying behavior and researched competitor's UX. Provided feedback to the design team for initial wireframes and improved product features using A/B Testing, increasing customer engagement by 2.5x.

### Software AG – Intern - India

Jan 2017 – Apr 2017

- Developed automated testing tool to convert free text to closest matching testing commands using tokenization, autocorrect, edit distance algorithms reducing manual testing time by 45%.

## EDUCATION

M.Sc. in Business Analytics, **University of Cincinnati, Carl H. Lindner College of Business**, OH, USA

Jan 2021 - Aug 2021

B.Eng. in Computer Science, **CMR Institute of Technology**, Bengaluru, India

Aug 2013 - Jun 2017

## PROJECTS

- Data analytics, Coding - Health insurance cross-sell prediction – <https://rpubs.com/gudimesc>
  - Built predictive model using Logistic Regression and Random Forest in R to predict if existing health insurance customer is interested in vehicle insurance using imbalanced dataset. Leveraged SMOTE technique to handle the imbalance by up-sampling interested customers count to 40% from 20%. AUC score of Random Forest on the balanced dataset increased to 95% versus 87% on biased dataset.
- Data analytics, Coding - Spotify data analysis – <https://rpubs.com/gudimesc>
  - Performed exploratory data analysis to determine characteristics that would generate a high track popularity and understand customer segments by using k-means clustering and KNN classification to add similar content of high performing genres.
- UI Design** – <https://saimounicagudimella.github.io/MyWebsite/> - Created a personal branding website using HTML, CSS, Javascript.
- 200 OK Hackathon – Ideated, designed, developed a website (front and back end) to create an automated question paper generator for exams. Led a team of 3 and secured 2<sup>nd</sup> place over 30 teams across Bengaluru.
- Team leader for Deloitte Impact Day to create study materials for underprivileged students and teach in schools lacking teachers.
- Google play store and mobile data analysis using Tableau– <https://public.tableau.com/app/profile/sai.mounica.gudimella#!/>

## SKILLS

SQL, Python, R, exploratory data analysis, linear and logistic regression, random forest, k-means clustering, KNN classification, naïve bayes, SVM, MSPE, confusion matrix, ROC, AUC, AIC, BIC, cross validation, SMOTE, bagging, boosting, Microsoft excel, Consulting