# Samiksha Agrawal

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## **EDUCATION**

University of Illinois Urbana-Champaign: Gies College of Business August 2023- May 2024

Master of science in Business Analytics

MIT World Peace University, India

Bachelor of Technology in Electronics and communication Engineering GPA: 8.8/10.00

## PROFESSIONAL EXPERIENCE

Graybar Champaign, IL

Business Analyst September 2023-present

- Elevated data analysis efficacy for a Fortune 500 client by meticulously scrutinizing and refining a dataset with approximately 180k entries across 25 variables, achieving a 15% boost in the predictive accuracy of stock item request.
- Spearheaded the creation of an advanced multiclass classification model, leveraging hyperparameter tuning to elevate success rate predictions to 80%, significantly boosting inventory management and operational efficiency.
- Advancing model precision by formulating a cost function that quantifies sales forecast errors, refining the algorithm's performance to decrease inaccuracies and elevate overall success rates significantly.

Applied AI Consulting Maharashtra, India

Junior Cloud Engineering Intern

April 2023

GPA: 3.84/4.00

July 2019- June 2023

- Enhanced the cold emailing process using 8-9 NLP techniques, such as BERT and NER, to automate and personalize subject lines, contributing to a potential 50% increase in open rates; streamlined LinkedIn scraping for efficient outreach, and reduced email drafting time, potentially reclaiming 21% of representative's workday.
- Refined backend operations by architecting and deploying REST APIs, harnessing AWS Lambda for efficient serverless computing and DynamoDB for scalable database management, leading to a reliable and maintainable system architecture.

## **PROJECTS**

# AI Parenting: Learning companion for toddlers

- Conceptualized "AI Parenting," as the global smart toys market is projected to surge from 13.8 billion USD in 2022 to USD 63.5 Billion by 2032, an interactive toy project targeting toddler, a significant market demand among working parents, with 47% of households having both parents working.
- Utilized computer vision algorithms to program the toy's camera lens, enabling object detection, colour detection and interactive learning conversations with the child.

# NFT Trump Card Insights: Polygon Dashboard with KNIME Workflow

- Developed a dashboard to showcase critical insights on the Polygon blockchain, leveraging Flipside for data access and implementing SQL queries to analyze monthly sales, revenues, and top-selling NFTs.
- Constructed a robust KNIME data workflow integrated with MongoDB, tailoring it for efficient processing of large datasets and enhancing visibility into Polygon's NFT ecosystem.

## AMD vs NVDA: The Race for AI Superiority

- Conducted an in-depth financial analysis using CapitalIQ data to compare the performance of AMD and Nvidia stocks, identifying a parallel trend prior to Gen AI's introduction and a significant surge in Nvidia's stock post-ChatGPT.
- Leveraged Wolfram Mathematica to analyze pre-gen and post-gen AI sales, perform text analysis on press releases to gauge the role of AI, and graphed stock prices using income statements.
- This analysis highlighting the impact of an innovation-driven strategy on equity market returns, emphasizing the importance of factors such as EPS and R&D expenditures in informing investment decisions in AI-related stocks.

## Predictive Modelling for Early Diagnosis of Diabetes and Anemia using ML

- Utilized a diverse dataset to train and employing more than 10 different algorithms, achieving commendable results with 80% accuracy in diabetes prediction and 85% accuracy in anemia detection.
- Designed and implemented a user-friendly GUI application, enabling seamless interaction for users to input relevant parameters and receive real-time disease predictions that could affect around 101 million patients in India alone.

## SKILLS, HONORS, ACHIEVEMENTS

**Technical skills:** Python | SQL | R | Tableau | Knime | MongoDB | AWS | Machine Learning | NLP | Wolfram **Certifications:** Data Analysis with R programming (Google certification), Microsoft Azure Fundamentals (AZ-900)