

# Naveen Virincheepuram

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## EDUCATION

**Indiana University, School of Informatics, Computing and Engineering** [Aug 2019 – May 2021]  
Masters in Data Science – Residential | GPA: 3.5 (*scale of 4*)

**Anna University, Sri Sairam Engineering College** [Aug 2012 - April 2016]  
Bachelor of Engineering, Civil Engineering | GPA: 3.45 (*scale of 4*)

World Education Services (WES) certified GPA

## PROFESSIONAL EXPERIENCE

**Mu Sigma Business Solutions, Bangalore, India** **Work Experience: 3 Years**  
**Decision Scientist**

**Client:** Financial Planning and Analysis (FP&A) Team – Retail | Fortune 100 [Sept 2016 – Jul 2019]

- Engineered org-wide Uplift measurement across Customer segments through building a methodology by implementing state-of-the-art Machine Learning and Statistical techniques for Anomaly Detection, Customer Profiling, Test-Control Selection and Causal Impact Analysis
- Increased reliability of an existing campaign measurement enterprise-level framework by providing R&D support and implementing advanced statistical techniques
- Reduced the turn-around time of critical cloud-based Tableau reports by 70% and improved storage efficiency through cloud engineering, migrating and automating complex analytical workflows from SAS to Python
- Enabled Store and Geography Level Uplift analysis to understand the impact of a new campaigns in selected stores
- Enhanced Test vs. Control Selection methodology for picking the right sample of stores/ customers suitable for testing a new campaign for performance analysis
- Democratized analytical capabilities through building a Google-Client API based Web Application and orchestrated analytical workflows in CI/CD environment across various Google Cloud Platform products using Jenkins

**Client:** Various Teams – Energy, BFSI, Retail, Pharma | Fortune 500

- Assess business problems for various client teams across business verticals and engineer analytical approach around stated use cases to capture and measure client's KPIs through data modelling, using an in-house analytical workbench
- Took a consultative role and guided various business teams on redesigning their existing analytical workflow to improve model performance and reliability

### Organizational Initiatives

- Presented several statistical topics to an audience of 100+ employees
- Taught classes on "Introduction to Statistics" and "Pythonic Programming" to new recruits during their training period

## TECHNICAL SKILLS

**Big Data:** Microsoft SQL • Postgre SQL • BigQuery • Teradata

**Platforms:** Google Cloud Platform • Tableau • R-Shiny • Google Colab • Jupyter Notebook • Jenkins • WordPress • Confluence

**Languages:** Python (scikit-learn, statsmodels, scipy, numpy, pandas, matplotlib, seaborn) • R (lm, ggplot2) • SAS • Julia • Groovy • Git

**Projects:** Clustering • Classification • Regression (OLS/ WLS/ Robust/ Logistic) • Time Series Forecasting (ARIMA/ Holtz-Winter) • Anomaly Detection (DBSCAN/ LOF/ Isolation Forest) • Feature Selection (BARUTA/ Random Forest/ MARS/ LASSO) • Causal Impact • Speech-to-Text • Text Mining (Topic Modelling + Sentiment Analysis) • A/B Testing • Pipeline Automation

**Responsibilities:** Statistical Analysis • Machine Learning • Cloud Engineering • Artificial Intelligence • Big Data • Automation • Information Visualization • Scientific Visualization • Research and Development • Client Relations • Project Management •

## ACADEMIC PROJECTS

### Artificial Intelligence:

Fall 2019

*Technologies Used: Python (scikit-learn, scipy, numpy, pandas, matplotlib)*

- Programmed an AI to play and win games against humans, with rules similar to 1024 game using Expectiminimax
- Devised a method to tackle the travelling salesman problem by implementing Bidirectional Heuristic Search
- Implemented Decision Trees from scratch to predict the correct orientation images with an accuracy of 70%
- Deciphered encrypted messages with substitutions and transpositions using Hidden Markov Models

## ACCOMPLISHMENTS

- Received the highest degree of award for exhibiting great ownership in driving R&D for FP&A team and improving trust with key stakeholders by providing timely recommendations, setting high standard on quality of work and client satisfaction
- One among the earliest candidates to be promoted to and be certified as Decision Scientist upon leading a team of seven trainees and successfully completing in-house online courses on Math, Business, Technology and Design Thinking
- Received multiple awards for being diligent and sincere in building and converting business proposals