Jawahar R M Senior Research Analyst LinkedIn

Profile

I am a proactive and results-oriented Research Analyst with a proven track record of leveraging exceptional analytical skills to achieve high performance. Proficient in both independent and collaborative settings, I thrive under tight deadlines. As a Certified Analyst with proactive instincts and demonstrated programming expertise, I am dedicated to delivering valuable insights that contribute to organizational success.

Programming Languages: Python, R, Tableau, SQL

Models: Machine Learning Algorithms, Statistical and mathematical models, Azure Data Factory

Professional Experience

Senior Research Analyst - St John's Research Institute, Bengaluru, Karnataka (July 2022 – till date)

- Lead a team of analysts in conducting data analysis, model development, and interpretation to provide insights and recommendations for optimizing public health programs.
- Collaborated with cross-functional teams to integrate data analytics into decision-making processes, improving operational efficiency and overall strategic direction.

Research Analyst - *St John's Research Institute, Bengaluru, Karnataka (January 2021 – June 2022)*

- Conducted comprehensive data analysis using Python, presenting findings to stakeholders, and suggesting data-driven improvements for program efficacy.
- Developed and maintained statistical models, identifying trends and patterns that guided program strategies and improved resource allocation.
- Collaborated with project teams to design experiments and gather relevant data, ensuring the accuracy and validity of analyses.

Research Analyst Intern - *St John's Research Institute, Bengaluru, Karnataka (October 2020 – December 2020)*

• Applied statistical models in public health data, focusing on Rasch modelling and linear optimization. Collaborated with a team to analyze and interpret results for actionable insights.

Projects

WHO India - Optimization Study

Tools Used: Python, R

Publications: WHO - SNP Tool (https://datatools.sjri.res.in/SNP/)

- Executed the development of a linear programming optimization model aiming to suggest the most cost-effective recipes for beneficiaries in Anganwadi centers under the ICDS Program across India.
- Conducted extensive data collection and analysis throughout India to comprehend the current provisions of the ICDS program and the specific nutrient recommendations for different age groups.

Role of Cash Transfers in Mitigating Food Insecurity in Bihar, India during COVID-19

Tools Used: Python

Publications: Published Paper https://pubmed.ncbi.nlm.nih.gov/35760544/

• Utilized Rash analysis techniques to quantify food insecurity over various time points and assessed the prevalence of food insecurity based on FAO guidelines. Used GEE models to identify the impact of cash transfers on food security during the COVID-19 pandemic.

Karnataka ICDS – THR Program - Supplementary Nutrition Optimization Web Tool

Tools Used: Python, R

Publications: Karnataka - ICDS tool (https://datatools.sjri.res.in/ICDS/)

• Engineered a Linear programming optimization model to recommend an optimal diet plan at minimal cost to meet the nutritional needs of children and women in Anganwadi centers under ICDS, aligning with the provisions of ICDS and the nutrient recommendations for different age groups.

State and District-Level Diet Plan for Different Age Groups across India

Tools Used: Python

Publications: Foods Optimized for Population (https://datatools.sjri.res.in/FOP/index)

- Devised a Linear programming optimization model to propose an optimal diet plan with minimal cost for different age groups across India, considering nutritional recommendations and varying income levels.
- Formulated recommendations, including subsidies on specific foods, to promote healthier dietary choices, particularly for low-income populations.

Dashboard - Explore and Analyse the Relationship Between Various Aspects of Foods in India

Tools Used: Python

Publications: Foods of India (https://datatools.sjri.res.in/FOII/index.html)

 Developed an interactive dashboard for visualizing and comparing the production, consumption, and market prices of various food items over different years, offering valuable insights into the dynamics of the Indian food market.

Diet Optimization Web Tool for Different Age Groups of the Population

Tools Used: Python

Publications: Diet Optimization Tool (<u>https://datatools.sjri.res.in/DOT/</u>)

 Innovated a Linear programming optimization algorithm to propose the optimal diet plan with minimal cost for various age groups, aligning with the current ICMR-NIN nutrient recommendations. The tool empowers individuals to customize their dietary choices while ensuring nutritional adequacy.

Education Qualifications

Master of Science in Statistics

- Loyola College, Chennai, Tamil Nadu
- June 2018 May 2020 (CGPA: 8.1)

Bachelor of Science in Statistics

- Loyola College, Chennai, Tamil Nadu
- June 2015 May 2018 (CGPA: 7.9)

Key Projects

Automated Classification of eBooks using Text Mining (2020)

Developed an automated model utilizing sentiment analysis and text mining techniques to classify over 450 eBooks into their respective academic subjects, enhancing accessibility and organization.

Forecasting Trends in Fuel Prices (2019)

Analyzed fuel price data from various sources using SQL and applied ARIMA time series modelling to forecast trends in fuel prices, aiding in better financial planning and decision-making.

Automated Classification of Bank Loan Applications for Approval (2017)

Built an automated model to process bank loan applications by predicting the risk of loan payment using customer information and credit history data, optimizing the loan approval process.

Predicting the Chance of Getting Admission to Foreign Universities (2016)

Utilized regression and logistic models on admission data to predict and classify students based on their likelihood of gaining admission to various foreign universities, aiding students in informed decision-making regarding their academic future.

Paper Publications

- Role of cash transfers in mitigating food insecurity in India during the COVID-19 pandemic: a longitudinal study in the Bihar state. BMJ Open. 2022 Jun 27; <u>https://pubmed.ncbi.nlm.nih.gov/35760544/</u>
- A longitudinal survey on changes in employment and food consumption during the COVID-19 pandemic in rural Bihar, India. J Nutr. 2023 Jul 20: <u>https://pubmed.ncbi.nlm.nih.gov/37479115/</u>