# Mary John

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#### **EDUCATION**

### W. P. Carey School of Business at Arizona State University

Master of Science, Business Analytics

Aug 2024 – Dec 2025 GPA: 3.93/4

Descriptive & Predictive Analytics, Business Process Analytics, Analytical Decision Modelling, Quantitative Risk Management, Strategic Procurement, Machine Learning in Business, AI in Data Analytics Strategy, Operations and Supply Chain Management

**Christ University | Student Council Member** 

Jun 2021 – May 2023 GPA: 3.23/4

Sample Survey Designs, Multivariate Analysis, Time Series, Neural Network and Deep Learning, Bayesian Inference

Christ University | Core Leader of Association Christian Christities, Event Head for fests

Jun 2018 - May 2021

Bachelor of Science, Triple Major in Economics, Mathematics and Statistics

GPA: 3.69/4

#### **SKILLS**

Languages & Tools: R Programming, SQL, MS Excel, Python, PowerBI, Tableau, SAP, ArcGIS, SPSS, AWS, Lucidchart Certifications: SAP BTP, SAP Analytics Cloud, AWS, Databases and SQL by IBM, Data Analysis with Python

### PROJECT EXPERIENCE

Master of Science, Statistics

# Computer Vision to Improve ASU Graduation Ceremony | OpenCV, dlib, HOG, Face Recognition Mar 2025-May 2025

- Reviewed software requirements for facial recognition-based graduation logistics system. Designed business process workflows using Lucidchart to map student ID verification, photo display, and data sync steps.
- Collaborated with technical team to interpret system documentation and align database integration with ASU student records.
- Conducted multiple rounds of usability testing to ensure accurate student identification and system performance under various conditions, validated >97% accuracy under normal conditions with multi-angle jitter-based re-verification.

# Tucson Pizza Review Analyzer - Yelp Project | Python, BERT, Claude, LoRA, EDA, NLP, ML Jan 2025–Mar 2025

- Designed a full artificial intelligence pipeline using BERT for aspect-based sentiment modeling and statistical analysis; generated automated summaries with Claude (Amazon Bedrock), using AI and NLP to process the customer reviews.
- Built a keyword-driven restaurant recommender using a LoRA fine-tuned model through predictive analytics; performed indepth EDA with WordClouds, and visualizations and used it to predict top 3 restaurants based on the customer keywords.

# Missing Data Imputation Techniques in Multilevel Designs | Statistical Analysis, Research Paper Nov 2021 – May 2023

 Analyzed the missing data techniques dealing with healthcare data of Beck Depression Inventory in a hierarchical structure, nesting teens with depression under classes and PU colleges. Used R Programming and SPSS for the statistical data analysis.

## Spatial Modelling of COVID-19 Outbreak in Bengaluru ISPS Conference

Mar 2023 – Apr 2023

• Conducted a spatial modeling study to analyze the correlation between air pollution and COVID-19 mortality through statistical tests utilizing ArcGIS, bivariate LISA to identify high-risk zones and inform mitigation strategies.

## PROFESSIONAL EXPERIENCE

## **Data Analyst Intern** KATBOTZ LLC

May 2025 - Present

- New Jersey, USA
- Performed various visualizations on KPI's to help in creation of the product called CFO Dashboard using BI tool SAP BTP.
- Processed data and KPI filtration of various companies through Bloomberg and analyzed using SAP Analytics Cloud.

## Research Aide (Machine Learning and XAI)

Nov 2024 - Present

Arizona State University

Tempe, Arizona

- Engineered a robust Explainable AI framework for early-stage breast cancer detection, enabling transparent decision-making.
- Developed an Explainable AI framework with HonorHealth, integrating CVAT-based image annotation and YOLOv8 for high-accuracy of 96% classification of benign vs. malignant tissue, including mass formations and architectural distortions.
- Enhance model performance through continuous testing, refinement, and validation using annotated datasets through.

# **Executive Trainee- (Actuarial Group Pricing)**

Jun 2023 – Jul 2024

Digit Life Insurance

Bengaluru, India

- Validated & managed financial data for 1,000+ B2B companies in healthcare and life insurance by identifying, analyzing, and interpreting trends or patterns, ensuring data integrity in pricing & supplier analysis using Excel (Pivot Tables, Macros).
- Optimized supplier pricing strategies & risk assessments though market research, reducing discrepancies by 20% and enhancing premium rate accuracy using historical data analyzing the claims and rates from past.
- Streamlined premium collections, leveraging data-driven insights to optimize pricing models, achieving a ₹300 crore premium target with high quotation speed by identifying the market rates and trends.