### Joji Yanagii

yanagiijoji@gmail.com

### **Summary**

Data Scientist with 3 years of experience at Deloitte, specializing in transforming complex data into actionable insights for decision-making. Proficient in Python, SQL, Shell Script, Tableau, and machine learning, with proven success in leveraging advanced analytics to solve real-world problems. Skilled in cross-functional collaboration and stakeholder communication. Holds a Master's degree in Information Science.

#### **Education**

#### Master of Information Science

Nara Institute of Science and Technology (NAIST), 2021

### Professional Experience Data Scientist, Deloitte

Oct. 2021 - Present

## Scientific Paper Analysis using Text Vectorization and Network Analysis (Education)

- Independently conducted in-depth text analysis and data visualization to assess the performance and interdisciplinary collaboration within research groups.
- Leveraged Python, BERT models, clustering algorithms, and Tableau to extract insights, supporting strategic decision-making for academic evaluations.
- Presented findings to clients, providing detailed reporting on research impact and collaboration networks.
- Fraud Detection using Face Recognition and OCR on AWS (Government)

- Developed and deployed a fraud detection system using AWS
  Rekognition for image processing, integrating Face Recognition and
  OCR capabilities to identify counterfeit ID cards.
- Successfully led the project, coordinating with experts to refine image processing accuracy, preventing over 100 cases of fraud and saving approximately 1 billion yen.
- Tools: Python, Shell Script, AWS EC2, S3, and Linux.

## Sentiment Analysis using LLM on Google Cloud for Marketing Decision Making (Retail)

- Conducted sentiment analysis on 3,000+ Twitter posts to determine public perception of products, using Vertex AI and Python for data collection, annotation, and LLM processing.
- Delivered comprehensive sentiment reports, highlighting product reception trends and providing actionable insights for client marketing strategies.

# Sales Forecasting for M&A Decision-Making using Machine Learning (Healthcare)

- Developed a sales forecasting model to aid M&A decision-making in the eldercare sector, with a focus on long-term revenue forecasting.
- Employed scikit-learn to implement a linear regression model,
  enhancing accuracy through a logarithmic transformation of growth
  data, allowing clients to assess potential acquisition growth.

### Online Survey to Estimate the Number of Baseball Fans (Sports)

- Led a targeted survey of 3,000+ respondents to estimate the size and demographics of the baseball fan base, supporting strategic marketing efforts.
- Analyzed data with statistical techniques and clustering to identify key target demographics. Produced visualizations and PowerPoint presentations for client stakeholders.

#### **Technical Skills**

- Programming Languages: Python, SQL, Shell Script, C#
- Data Science Techniques:

- Machine Learning (Clustering, Dimension Reduction, Regression Analysis)
- o NLP (Sentiment Analysis, Topic Modeling, Language Models)
- Computer Vision (Image Processing, OCR)
- Network Analysis (Centrality, Community Detection)
- Tools & Platforms: Tableau, Alteryx, ArcGIS, AWS (Rekognition, EC2, S3, SageMaker), Google Cloud (Vertex AI)
- Statistical Analysis & Modeling: Regression Analysis, Multiple Regression Analysis, Decision Tree, Hypothesis Testing and Significance Tests, PCA, Population Weighting, and Aggregation

### Languages

Japanese: Native English: Proficient

Arabic: Basic/Conversational