## ANBU EZHILMATHI NAMBI

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#### **EDUCATION**

# The George Washington University, School of Engineering & Applied Science Master of Science in Data Analytics

Washington, DC May 2025

 Relevant Coursework: Design and Analysis of Algorithms, Advanced Database Management, Statistical Analysis and Modeling, Machine Learning, Natural Language Understanding, Data Visualization.

### Sri Ramachandra Engineering and Technology Bachelor of Technology in Computer Science

Chennai, India May 2023

• Relevant Coursework: Data Structures & Algorithms, Probability and Statistics, Computer Vision, Natural Language Processing, Machine Learning Algorithms, Data Mining, Data Science, Business Analytics.

#### **TECHNICAL SKILLS**

- Programming Languages: Python, R programming, MySQL, MongoDB, C, JavaScript, HTML/CSS, React.js.
- Tools and Technologies: Tensorflow, Flask, Firebase, Jupyter Notebook, Google Colab, Tableau, Power BI, Git, Android Studio, AWS.
- Other Skills: Machine Learning and Techniques, Web App Development, API integration, Relational Database Management.

#### PROFESSIONAL EXPERIENCE

## **RSquare Konnect**

Chennai, India

Nov 2021 - Jun 2023

- Data Analyst Intern
- Developed a Python-based data preprocessing pipeline for 3+ years of e-commerce data (14K+ records), reducing processing time by 90% and improving data accuracy by 80% through advanced data cleaning techniques, and automation.
- Executed K-Medoids-based customer segmentation, identifying actionable user clusters to optimize marketing strategies and improve customer retention.
- Performed churn analysis using Random Forest, achieving 81% accuracy in predicting customer behavior and categorizing customers (e.g., likely to churn, loyal) for targeted retention strategies.

#### Stack Nation

Chennai, India

Flutter App Developer

Jan 2021 - Mar 2021

- Designed a user-friendly interface for an internship portal, increasing user engagement by 40%.
- Integrated web services to streamline job postings and candidate data retrieval, reducing data processing time by 50% and improving portal efficiency.
- Conducted extensive testing and debugging to ensure a seamless user experience and enhance platform reliability.

#### **TECHNICAL PROJECTS**

## **Eidetik: Contextual Memory Assistant for Intelligent Document Management**

Jan 2025 - Apr 2025

- Built a vector memory store using MongoDB and Pinecone with MiniLM-L6-v2 embeddings, enabling rapid, similarity-based key value lookups.
- Implemented NLP query preprocessing, prompt engineering and LLM security checks, and a chatbot for text queries.

#### **Intent Classification using ATIS Dataset**

Nov 2024 - Dec 2024

- Built an NLP pipeline (tokenization, stop-word removal, TF-IDF) and trained baseline models (Naïve Bayes, Logistic Regression).
- Developed and fine-tuned CNN and BERT models in Python, achieving 95% accuracy and 94% F1 score and concluded that transformer-based methods outperformed traditional classifiers.

## American Sign Language Recognition System

Mar 2024 - Apr 2024

- Led the development of an ASL recognition system, improving communication accessibility for over 500 users by addressing language barriers.
- Achieved 93% recognition accuracy using deep learning models like VGG16, ResNet50, and custom models to enhance real-time gesture interaction speed and accuracy.

#### **CERTIFICATIONS**

- Machine Learning, Stanford University (2025) | Credential ID: coursera.org/verify/specialization/0H1CY.
- AWS Machine Learning Foundations, AWS Academy (2022) | Credential ID: credly.com/badges/55d07.

#### **PUBLICATION**

#### Assessment of Cardiac Dynamics and Risk Factor Analysis Using Deep Neural Nets

Jan 2021 - Jun 2021

• Co-authored Chapter 7 in *Leveraging AI Technologies for Preventing and Detecting Sudden Cardiac Arrest and Death* (IGI Global International Academic Publisher). Focused on advancing cardiovascular risk prediction using Machine Learning techniques, offering innovative insights into early detection and prevention strategies.