Beulah Divya Kannan

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EDUCATION

University of Southern California

Los Angeles, United States

Master of Science in Analytics

December 2025

Coursework: Predictive Analytics, Optimization methods for Analytics, Data Management, Enterprise Business Intelligence, GPA: 4.0

Madras Institute of Technology, Anna University

Chennai, India

Bachelor of Engineering, Electronics and Communications Engineering

June 2023

Coursework: Data Structures and Applications, Engineering Mathematics, Linear Algebra, Parallel Distributed Processing, IOT enabled Systems Design, Principles of Management, CGPA: 8.33/10

SKILLS AND INTERESTS

Technical skills: Python(Pandas, Numpy, Matplotlib, Seaborn, Scikit-Learn), MySQL, NoSQL, ETL, Data Design/Warehousing, Tableau, MongoDB, AWS Sagemaker, Microsoft Office(Excel, Word, Powerpoint), Forecasting, Statistical Analysis, GCP, Vertex AI, MLOps, Jira Other skills: Leadership, Communication, Team Player, Strategic Thinking, Problem Solving, Detail-Oriented Interests: Business Analytics, Data Analytics, Product Management, Baking, SkyDiving

INTERNSHIP EXPERIENCE

WorkUp

Data Science Intern

Los Angeles, United States

May 2024-July 2024

- Conducted in-depth analysis using Python to identify user engagement and sentiment patterns, optimizing recommendation algorithms with Nvidia Merlin and Deep & Cross Network (DCN) to improve content relevance on the 'For You' page.
 Collaborated with cross-functional teams to align business requirements with user needs
- Developed workflows to integrate and clean large datasets, conducting comprehensive data exploration and feature
 engineering to identify key features like tracking time spent on page metrics to uncover trends that improved session duration
 that drove operational improvements used by around 120 users.
- Leveraged synthetic datasets and optimization techniques to elevate model accuracy to 0.9808 supporting engagement growth

National Institute of Technology, Tiruchirappalli

Tiruchirappalli, India

Research Intern

March 2023-August 2023

- **Published 4 peer-reviewed papers** on Web 3.0-compliant recommendation systems, including video, image and news recommendations, leveraging deep learning, ontology alignment, and semantic modeling.
- Designed and fine-tuned models using techniques like TF-IDF, Jaccard similarity, and radial basis neural networks, achieving significant improvements in prediction accuracy and retrieval precision. Publications Link

ACADEMIC PROJECT EXPERIENCE - https://github.com/Beulah-D

Decoding Global Layoff Trends(2020-2024): A data-driven Exploration

August 2024

- Conducted a comprehensive SQL-based analysis of global layoff trends, uncovering a 150% surge in tech industry layoffs and a 30% increase in early-stage startup layoffs, with 2023 showing the highest layoff rates, highlighting significant industry and economic shifts
- Delivered findings through Tableau dashboards, offering stakeholders clear, actionable insights to better understand market volatility and trends. <u>Project Link</u>

Data Exploration and Insights: Climate Change Impact on Agriculture

October 2024

- Designed an interactive Tableau dashboard analyzing the impact of climate change on agriculture (1990-2024), featuring KPIs such as crop yield per hectare, irrigation access, pesticide use, and economic impact across regions and crop types.
- Integrated dynamic filters, geospatial analysis, and navigation capabilities, enabling in-depth exploration of regional agricultural trends, evaluation of adaptation strategies, and insights to support business intelligence and decision-making. Project Link

Surveillance based anxiety detection using gender-based facial emotion recognition

May 2022- December 2022

- Developed an integrated framework using CNN and OpenCV for real-time facial recognition and emotion analysis, accurately detecting facial features, gender, and emotions.
- Built a high-accuracy gender classification model with Keras, with results published in the <u>IEEE Digital Explore Library</u>, showcasing advancements in anxiety detection through facial emotion recognition

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

Viterbi Career Ambassador, Viterbi School of Engineering, USC

August 2024-Present

Mentored peers in career development, facilitated workshops and guided students in professional growth