

# Eashwar Subramanian

Data Science Intern | AI Systems & RAG | Healthcare & Cloud Applications

Subclass 500 | eashwars2001@gmail.com | +61 450 332 782 | [LinkedIn](#): linkedin.com/in/eashwar-s-02461a1b3 | [GitHub](#): github.com/Eashwar-Subramanian

## PROFESSIONAL EXPERIENCE

**Upcoming Internship - Data Science Intern**  
Culture Infusion  
Offer secured; internship commencing January

Jan 2026 – Apr 2026  
Melbourne, Australia

**Data Science Intern**  
Solara Health

July 2025 – Nov 2025  
Melbourne, Australia

- Built the full ingestion and semantic chunking pipeline (PDF/HTML parsing, MiniLM embeddings, metadata governance, deduplication via SHA-256), enabling clinically reliable document retrieval across 3 data tiers.
- Designed tenant-aware retrieval logic using hierarchical routing (hospital → national → state) and PostgreSQL RLS, ensuring TGA-compliant information segregation across multi-hospital deployments.
- Implemented the end-to-end evaluation framework (RAGAS + semantic similarity proofs) generating quantifiable metrics for faithfulness (69.4%), answer relevancy (54.3%), context precision (92.7%), and recall (91.2%).
- Diagnosed and improved retrieval quality through embedding validation, cross-encoder reranking tests, chunk coherence audits, and multi-tenant consistency checks.
- Led Sprint 4 delivery, resolving merge conflicts, coordinating Jira tasks, and unblocking the pipeline for cross-functional contributors.

**Data Analyst Intern**  
PrepInsta Pvt Ltd (Remote)

Dec 2023 – Feb 2024  
India

- Delivered 5+ stakeholder dashboards (Tableau, Excel) increasing client engagement by 10%
- Optimized SQL query performance reducing data retrieval time by 25% for executive reporting
- Automated reporting workflows with Python (Beautiful Soup) cutting manual effort by 30%

## STRATEGIC PROJECTS

**Solara Healthcare RAG System | June 2025 July – Nov 2025**

- Delivered a production-grade RAG system with semantic chunking, multi-tenant routing, ingestion governance, and hallucination controls, enabling clinically safe AI responses for Australian hospitals.
- Built a reproducible evaluation pipeline using RAGAS + semantic similarity proofs, producing measurable benchmarks (faithfulness 69.4%, context precision 92.7%, recall 91.2%) for ongoing model and retrieval improvement.

**Australian Retail Customer Segmentation | June 2025**

- Identified high-value customer segment representing 15% of total revenue through K-Means clustering
- Corrected 72.5% invalid order IDs in 5,000-transaction dataset enabling accurate RFM analysis

**Climate Policy Forecasting Dashboard | July – Sept 2024**

- Built SARIMA forecasting system achieving 1.2°C MAE for Australian government climate decisions
- Integrated Flask web app with interactive Folium mapping for urban planning stakeholder support

## TECHNICAL EXPERTISE

**Languages:** Python, SQL, R  
**Cloud/DevOps:** AWS (Bedrock, Aurora, S3, Lambda, EC2), Docker, CI/CD, Git  
**ML / Analytics:** RAG , Semantic Chunking (LlamaIndex), Sentence Transformers (MiniLM), RAGAS Evaluation, Scikit-learn, SARIMA, K-Means, Classification Models  
**Databases:** PostgreSQL (pgvector, RLS, IVFFlat Indexing), MySQL, DynamoDB, SQL Server  
**Visualization:** Power BI, Tableau, Matplotlib  
**Frameworks / Libraries:** Fast API, Flask, Pytest, Pedantic, Pandas, NumPy, BeautifulSoup4, pdfplumber  
**Other Specialisations:** Multi-Tenant Architecture, Safety Guardrails (AWS Bedrock), PII Redaction, Metadata Tagging

## EDUCATION

**Master of Data Science**  
Royal Melbourne Institute of Technology (RMIT)  
GPA: 3.4/4.0 | Expected Dec 2025 | Melbourne, Australia

**Bachelor of Electronics & Communication Engineering**  
Rajagiri School of Engineering and Technology  
First Class Distinction (8.8/10) | Aug 2023 | Kerala, India

## PROFESSIONAL DEVELOPMENT

**Data Science Melbourne Meetup - Active Member**

June 2024 – Present

Networking with 50+ analytics professionals | ML trends, Power BI, Python applications

**In Progress:** Microsoft Azure Data Fundamentals (DP-900) • Azure AI Fundamentals (AI-900)

**Relevant Coursework:** Machine Learning • Big Data Processing • Cloud Computing • Advanced Programming • Computer Vision • Probability & Random Processes