

Vinothini Balasubramani

Data Analyst

Dublin, Ireland (Returning) | vinothinibs09@gmail.com | LinkedIn: [linkedin.com/in/vinothini-balasubramani](https://www.linkedin.com/in/vinothini-balasubramani)

GitHub: github.com/VinothiniBS | Portfolio: vinothinibs.github.io/portfolio

Eligible for Critical Skills Employment Permit | Open to relocation

PROFESSIONAL SUMMARY

Data professional with prior onsite experience in Dublin, Ireland and an MSc from University College Dublin. Combines 2.5+ years of dedicated data analytics and automation experience with a broader 6+ year background in software engineering and data integration. Specializes in building Python-based ETL pipelines, GCP/BigQuery data products, and Power BI dashboards that automate manual workflows and convert business questions into measurable outcomes.

CORE SKILLS

Analytics & BI: Power BI, Looker Studio, Tableau, Advanced Excel, KPI Dashboarding, A/B Testing

Programming: Python (Pandas, NumPy, Flask), SQL, R, JavaScript

Data Engineering & Cloud: ETL Pipelines, Google Cloud Platform, BigQuery, REST API Integration, SAP CPI/PO, Oracle, MySQL

Techniques: Data Cleaning, Forecasting, Automated Reporting, Data Quality Validation, Anomaly Detection, Machine Learning

Tools & Platforms: Git, Google Apps Script, Jupyter, dbt, Airflow

EMPLOYMENT HISTORY

Analytics and Automation Engineer

Assay Genie, Remote | Since Jan 2026

- Architect and automate **end-to-end data pipelines** in Python processing 10,000+ product and operational records, improving processing efficiency and eliminating recurring manual tasks.
- Built automated documentation systems generating **product datasheets for 100+ products/week**, reducing manual documentation effort by 70%.
- Designed and deployed a **Quality Control application on GCP and BigQuery**, automating data validation, anomaly detection, and real-time monitoring across large product datasets, reducing manual QA effort and accelerating issue resolution.
- Optimized data workflows and validation processes, cutting manual intervention by 50%+ and improving cross-system data consistency.

Data Analyst

Assay Genie, Dublin, Ireland (Onsite) | Jan 2024 - Mar 2025

- Designed **Looker Studio and Power BI dashboards** delivering self-service analytics on supply chain and sales performance, enabling stakeholders to make decisions 15% faster.
- Automated **weekly leadership reporting** by fetching and processing data from the Cin7 API in Python, saving 8+ hours per month for the leadership team.
- Built **Python-based forecasting models** that improved inventory accuracy and reduced overstock by 25%, directly impacting working capital.
- Automated data pipelines and product workflows via Google Apps Script, improving report accuracy and reducing manual work by 60%.
- Developed a **Flask-based application** to generate product datasheets, cutting documentation workload by 70%.

Data Integration Engineer

Tech Mahindra, Chennai, India | Apr 2020 - Jun 2022

- Developed **50+ SAP CPI/PO integration** pipelines, reducing sync errors by 40% and improving system efficiency for enterprise clients.
- Resolved 100+ **EDI transformation issues**, improving data workflows and reducing incident volume by 35%.
- Wrote optimized SQL scripts for database schema design and reliable data loads across Oracle databases.
- Partnered with business and data teams to ensure reliable data availability for downstream reporting and analytics.

Full Stack Developer

Tech Mahindra, Chennai, India | Jun 2018 - Mar 2020

- Built **responsive UI components** using Angular, HTML, and JavaScript for a major telecommunications client's internal application.
- Enhanced backend processes using Java and MySQL for a banking client, improving query performance by 20%.
- Collaborated with QA and DevOps teams for smooth feature rollouts, maintaining a 98% deployment success rate.

EDUCATION

MSc in Data and Computational Science, Sep 2022 - Aug 2023

University College Dublin, Ireland | Second Class Honours, Grade 1 (2H1)

Bachelor of Engineering in Mechatronics, Aug 2013 - Apr 2017

SNS Institutions, India | First Class with Distinction (8.3/10)

CERTIFICATIONS

Career Essentials in Data Analytics - Microsoft & LinkedIn | Dec 2025

MySQL for Data Analytics and BI - Udemy | Dec 2025

Google Data Analytics - Google / Coursera | Oct 2023

PROJECTS

E-Commerce Sales Analysis & Forecasting (Python, Pandas, Prophet)

- Analyzed e-commerce transaction data to surface monthly trends, top products, and country-level demand; built a Prophet model forecasting sales for 30 periods ahead.
- Implemented RFM (Recency, Frequency, Monetary) customer segmentation to enable targeted marketing and retention strategies.

COVID-19 Vaccination Impact Analysis (R)

- Built regression and anomaly-detection models to quantify the relationship between vaccination coverage and infection trends, supporting risk-focused public health assessment (MSE: 0.0702).
- Developed stakeholder-ready visual reports to communicate trend deviations and policy impact insights.

Irish Weather Insights Dashboard (R Shiny)

- Designed an interactive R Shiny dashboard to compare climate trends across Dublin, Belmullet, and Malin, integrating historical metrics such as temperature, humidity, wind speed, and precipitation.
 - Enabled city-level comparison and seasonal trend forecasting to support tourism and environmental monitoring.
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