**5 Suitable Job Roles for Merlin Valanarasu:**

**1. Data Analyst**

**Why it's suitable:** Merlin has strong data analysis skills using Excel, Python (Pandas, NumPy), R, and SPSS. They've completed the Google Data Analytics certification and have practical experience analyzing cancer registry data during their internship at Adyar Cancer Institute.

**Key matching qualifications:**

* Statistical education background (B.Sc. in Statistics)
* Proficiency in data analysis tools (Excel, Python, R)
* Experience with SQL queries
* Data visualization skills
* Real-world project experience in predictive modeling

**2. Biostatistician / Healthcare Data Analyst**

**Why it's suitable:** Merlin's internship at Adyar Cancer Institute provided experience in analyzing healthcare data, specifically cancer statistics. This specialized experience, combined with their statistical education, makes them well-suited for analyzing medical and healthcare data.

**Key matching qualifications:**

* Experience in cancer registry data management
* Statistical analysis in healthcare setting
* Familiarity with epidemiological research
* Strong foundation in hypothesis testing and statistical analysis
* Project experience in predictive modeling

**3. Business Intelligence Analyst**

**Why it's suitable:** Merlin has developed interactive dashboards using Excel and has experience in business-related data analysis projects, such as salary comparison and employee satisfaction studies. Their combination of technical skills and business domain knowledge would be valuable in this role.

**Key matching qualifications:**

* Dashboard creation experience
* Business domain knowledge
* SQL and data visualization skills
* Project experience analyzing business metrics (salary, HR practices)
* Statistical analysis capabilities

**4. Junior Data Scientist**

**Why it's suitable:** With experience in machine learning algorithms, model building, and predictive analytics (demonstrated in their IT job satisfaction project), Merlin has the foundational skills needed for an entry-level data science position.

**Key matching qualifications:**

* Experience with machine learning algorithms
* Python programming skills
* Statistical foundation
* Predictive modeling experience
* Data visualization capabilities

**5. HR Analytics Specialist**

**Why it's suitable:** Merlin's project on "Employee Perception Towards HR Practices" demonstrates their ability to apply data analysis to human resources challenges. This specialized experience, combined with their leadership skills, makes them a good fit for HR analytics roles.

**Key matching qualifications:**

* Project experience in HR data analysis
* Statistical analysis skills
* Experience with SPSS for HR data
* Understanding of employee satisfaction metrics
* Leadership experience that provides people management insight

These job roles leverage Merlin's strong foundation in statistics, data analysis, and visualization skills while also considering their specific project experience and professional interests. Each role offers a path to utilize their education and developing expertise in data analytics.

**5 Interview Questions for a Data Analyst Position**

Based on Merlin's qualifications, here are 5 targeted interview questions that would help assess their suitability for a Data Analyst role:

**1. Technical Skill Assessment**

**Question:** "During your internship at Adyar Cancer Institute, you analyzed stomach cancer data. Could you walk us through your data cleaning and analysis process, including which tools you used and any challenges you encountered with data integrity?"

**Purpose:** This question evaluates:

* Practical application of technical skills in a real-world context
* Experience with healthcare data which often has complex structures
* Problem-solving abilities when facing data quality issues
* Tool selection process for specific analytical tasks

**2. Statistical Knowledge Application**

**Question:** "Based on your statistics background, describe a situation where you applied hypothesis testing to solve a business problem. What was your null hypothesis, what statistical method did you choose, and how did you interpret the results for non-technical stakeholders?"

**Purpose:** This question assesses:

* Understanding of statistical concepts beyond theoretical knowledge
* Ability to frame business questions as statistical problems
* Communication skills when explaining complex statistical concepts
* Decision-making process for selecting appropriate statistical methods

**3. Data Visualization Experience**

**Question:** "In your resume, you mentioned creating a Salary and Bonus Comparison Dashboard using Excel. Could you describe your approach to designing this dashboard? How did you determine which visualizations would be most effective for the data you were working with?"

**Purpose:** This evaluates:

* Data visualization principles and best practices
* User-focused design thinking
* Decision-making process for selecting appropriate chart types
* Experience with creating interactive, functional dashboards

**4. SQL and Database Knowledge**

**Question:** "Can you describe a complex SQL query you've written? What was the business question you were trying to answer, and how did you structure your query to efficiently retrieve and analyze the data?"

**Purpose:** This assesses:

* Practical SQL knowledge beyond basic syntax
* Understanding of query optimization
* Ability to translate business questions into technical queries
* Experience with database structures and relationships

**5. Project Management and Communication**

**Question:** "For your predictive model on job satisfaction in the IT sector, how did you approach the project from start to finish? How did you communicate your findings and recommendations to stakeholders, and what impact did your analysis have?"

**Purpose:** This evaluates:

* End-to-end project management abilities
* Structured analytical thinking
* Communication skills with various audiences
* Business impact orientation
* Experience with predictive modeling techniques