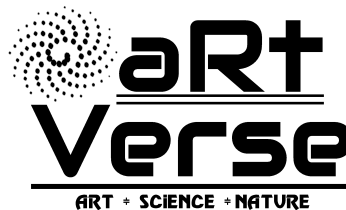## Data Engineer

- Develop/construct/test/maintain databases & data structures
- Align data architecture & business
- Data aquisition/create & retreive info/examine data
- Research industry/business questions
- Deploy analytics/machine learning/statistical models
- Prepare data for predicitve/prescriptive modelling
- Automate tasks
- DBMS, SQL (sqlcmd utility), Azure Databricks, Azure HDInsight, Azure Cosmos DB, HiveQL, R, Python

aRt Verse
ART ⁜ SCIENCE ⁜ NATURE

Website & Blog
Amazon Books
Teepublic Shirts
RedBubble Merch
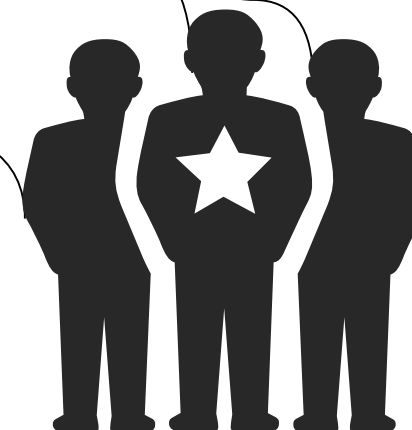SpreadShirt Apparel
Contrado Fashion

Database Administrator

- Manage databases
- User access/privileges
- Backup/restore/recover/archive
- Design/implement/controls on-premise & cloud
- Ensure availability/performance/optimised
- **Use Database Management Systems (DBMS)**
  - Administration & Maintenance
  - Automate tasks with scripts
  - SQL Server = SQL Server Management Studio (T-SQL = set of programming extensions for transaction control, exception & error handling, row processing & declared variables)
  - PosgreSQL = pd.Admin
  - MySQL = MySQL workbench
  - **Azure Data Studio = cross platform**
    - GUI
    - Connections on-prem & cloud

Data Analyst

- Understand data/communicate/visualise insights
- Large/complex data => accessible/understandable/usable
- Create visuals with focus areas
- Transform/improve/integrate data from many sources
- Combine data sources
- Find hidden patterns
- Create dashboards & reports
- SQL Server Reporting Services
- **Microsoft PowerBI**
  - Collection of software services, apps & connectors
  - Turn unrelated data into coherent/immersive/interactive visuals/insights
  - Connect on-prem and cloud

Data Professionals