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| **UX Specialist** | | | **Data Wrangler** | | | **Data Architect** | | |
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|  | **Salary:** Medium  **Ease to Recruit:** Medium |  |  | **Salary:** Medium  **Ease to Recruit:** Medium |  |  | **Salary:** High  **Ease to Recruit:** Hard |  |
|  | **Skill:** Designs intuitive  user interfaces |  |  | Skill: Cleans and refines  complex data |  |  | **Skill:** Oversees the data  strategy and  blends data  effectively |  |
|  |  |  |  |  |  |  |  |  |
| **Visualiser** | | | **Graduate SW Developer** | | | **Database Specialist** | | |
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|  | **Salary:** Medium  **Ease to Recruit:** Medium |  |  | **Salary:** Low  **Ease to Recruit:** Easy |  |  | **Salary:** Medium  **Ease to Recruit:** Easy |  |
|  | **Skill:** Enables insights to  be readily  understood |  |  | **Skill:** Building basic  systems in a range  of languages |  |  | **Skill:** Building and  Managing  Databases |  |
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| **Expert Software Engineer** | | | **Spatial and Temporal Data Analyst** | | | **Graduate Data Analyst** | | |
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|  | **Salary:** High  **Ease to Recruit:** Hard |  |  | **Salary:** Medium  **Ease to Recruit:** Medium |  |  | **Salary:** Low  **Ease to Recruit:** Medium |  |
|  | **Skill:** Understands a wide  range of languages  and dev methods |  |  | **Skill:** Obtaining meaning  from spatio-  temporal data |  |  | **Skill:** Modelling and  analytics |  |
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| **Recommendation Specialist** | | | **Statistical Computing Expert** | | | **GDPR and Ethics Expert** | | |
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|  | **Salary:** Medium  **Ease to Recruit:** Hard |  |  | **Salary:** Very High  **Ease to Recruit:** Very Hard |  |  | **Salary:** High  **Ease to Recruit:** Hard |  |
|  | **Skill:** Builds effective  recommendation  engines |  |  | **Skill:** Modelling data and  drawing accurate  inferences |  |  | **Skill:** Ensures sensitive and  personal data is  correctly handled |  |
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| **Machine Learning Specialist** | | | **Cyber Security Expert** | | | **Cloud Computing Specialist** | | |
|  | | |  | | |  | | |
|  | **Salary:** High  **Ease to Recruit:** Hard |  |  | **Salary:** Medium  **Ease to Recruit:** Hard |  |  | **Salary:** Medium  **Ease to Recruit:** Medium |  |
|  | **Skill:** Specialist in using  deep learning  techniques |  |  | **Skill:** Expert at defending  systems against  intrusion |  |  | **Skill:** Using cloud  environments  effectively |  |
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| **Hardware Specialist** | | | **Service Manager** | | | **Datacentre Manager** | | |
|  | | |  | | |  | | |
|  | **Salary:** Medium  **Ease to Recruit:** Easy |  |  | **Salary:** Medium  **Ease to Recruit:** Easy |  |  | **Salary:** Medium  **Ease to Recruit:** Easy |  |
|  | **Skill:** Good understanding  of managing on-site  hardware |  |  | **Skill:** Ensures good service  from vendors and  good service to  customers |  |  | **Skill:** Oversees local  computing centres |  |
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| **Agile Project Manager** | | | **PRINCE2 Project Manager** | | | **Customer Relationship Manager** | | |
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|  | **Salary:** Medium  **Ease to Recruit:** Very Easy |  |  | **Salary:** Medium  **Ease to Recruit:** Very Easy |  |  | **Salary:** Medium  **Ease to Recruit:** Very Easy |  |
|  | **Skill:** Rapid delivery of  development  projects |  |  | **Skill:** Formal project  management and  reporting |  |  | **Skill:** Ensuring customer  needs are  understood and  delivered |  |
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| **Subject Matter Expert** | | | **Network Engineer** | | | **Behaviour Analyst** | | |
|  | | |  | | |  | | |
|  | **Salary:** Medium  **Ease to Recruit:** Very Easy |  |  | **Salary:** Medium  **Ease to Recruit:** Easy |  |  | **Salary:** Medium  **Ease to Recruit:** Hard |  |
|  | **Skill:** Non-technical  subject matter  expertise (e.g. in  Retail Fraud) |  |  | **Skill:** Effective use of  networks |  |  | **Skill:** Understanding of  user behaviour |  |
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| **Basic Database** | | | **High-performance Data repository** | | | **Commodity server farm** | | |
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|  | **Cost:** **Very Low** |  |  | **Cost:** **Medium** |  |  | **Cost:** **Low** |  |
|  | **Function:** Data repository |  |  | **Function:** Data repository |  |  | **Function:** Local computing |  |
|  | **Examples:** MySQL  MongoDB |  |  | **Examples:** SQL PDW  Hive/MySQL/Derby |  |  | **Examples:** Standard servers running UNIX, Windows etc. |  |
|  | **Reduced effectiveness without:** Database Specialist |  |  | **Reduced effectiveness without:** Database Specialist |  |  | **Reduced effectiveness without:** Hardware Specialist |  |
|  |  |  |  |  |  |  |  |  |
| **Replicated Hi-perf datacentres** | | | **Visualisation workshop** | | | **3D Immersive Cave** | | |
|  | | |  | | |  | | |
|  | **Cost:** **Very High** |  |  | **Cost:** **Very Low** |  |  | **Cost:** **Very High** |  |
|  | **Function:** Hi-perf computing |  |  | **Function:** Effective visuals |  |  | **Function:** Outstanding visuals |  |
|  | **Examples:** High-perf servers running UNIX, Hadoop etc. |  |  | **Examples:** Shiny |  |  | **Examples:** Qlikview, Tableau |  |
|  | **Reduced effectiveness without:** DB Specialist, DC Manager |  |  | **Reduced effectiveness without:** Software Engineer, Modeller, Visualiser |  |  | **Reduced effectiveness without:** Software Engineer, Modeller, Visualiser, HW Specialist |  |
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| **Basic Cloud Presence** | | | **Heavy-duty elastic cloud** | | | **Basic Analytics** | | |
| C:\Users\tomlins3\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\6DACD23C.tmp | | | C:\Users\tomlins3\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\8080C296.tmp | | |  | | |
|  | **Cost: Very Low** |  |  | **Cost: High** |  |  | **Cost: Very Low** |  |
|  | **Function:** Basic remote computing container |  |  | **Function:** High capacity remote container for computing |  |  | **Function:** Data description, Basic inference, Modelling |  |
|  | **Examples:** Commodity cloud provision |  |  | **Examples:** Private Cloud |  |  | **Examples:** R libraries, Python libraries, SPSS, RapidMiner |  |
|  | **Reduced effectiveness without:** Coder, Cloud Computing Specialist |  |  | **Reduced effectiveness without:** Coder, Cloud Specialist, Service Manager |  |  | **Reduced effectiveness without:** 1 of Time Series, Spatial Stats Expert Recommend Expert, |  |
|  |  |  |  |  |  |  |  |  |
| **Advanced Analytics** | | | **Basic Security Control** | | | **Multi-component Security** | | |
|  | | |  | | |  | | |
|  | **Cost: Medium** |  |  | **Cost: Low** |  |  | **Cost: High** |  |
|  | **Function:** Advanced analytics for complex data |  |  | **Function:** Defend against hacking |  |  | **Function:** Defend against hacking |  |
|  | **Examples:** R,Python, SAS, Power BI, IBM Cognos, SAP |  |  | **Examples:** Firewall  AVS |  |  | **Examples:** Firewall  AVS, Threat Monitoring, SIEM |  |
|  | **Reduced effectiveness without:** Stats Computing Expert |  |  | **Reduced effectiveness without:** Cyber Security expert |  |  | **Reduced effectiveness without:** Cyber Security expert, Hardware Specialist |  |
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| **Basic Networking** | | | **Heavy-Duty Networking** | | |
| C:\Users\tomlins3\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\C3802D7.tmp | | | C:\Users\tomlins3\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\46BC070F.tmp | | |
|  | **Cost: Very Low** |  |  | **Cost: High** |  |
|  | **Function:** Standard connectivity |  |  | **Function:** Heavy-duty resilient networking |  |
|  | **Examples:** LAN, basic internet |  |  | **Examples:** Proprietary Fibre |  |
|  | **Reduced effectiveness without:** Network Specialist or Service Manager |  |  | **Reduced effectiveness without:** Network Specialist and Service Manager |  |
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