# Job Title

|  |  |
| --- | --- |
| **Member** | **Job title** |
| Anthony Brown | Full-Stack Developer |
| Tim Damon | Senior Gameplay Designer |
| Shaun Lottey | Senior C++ Engineer (Gameplay Programmer) |
| Jake McAndrew | ASD Software Developer/cybersecurity |
| Jason Tilgner | developer / full stack developer. |
| Jason Walstab | IoT Solutions Leader |

## Consideration of what the Burning Glass list of job titles is presenting

The burning Glass data ranked by count of job descriptions across a year is a little apocalyptic. There are some obvious problems, once smoothed out and accounted for the figures reflect a different outcome.

### Data adjustments

Firstly, the current listing is also overly dramatic. The difference between counts for some descriptions is inconsequential, so it is better to group these, instead of taking on face value that job A is in more demand than job B because it is one step higher in the rank. I did this by converting to a percentage of the total, then ranking by base points (first decimal of the percentage). Ranking cells changed from 200 to 24. See TABLE1.

Look at this new arrangement; I see the top 50% of job counts are within the range of 1%-3%, which is very close to each other. I wonder, for half the jobs listed, if this ranking is insightful at all.

The second issue is that job titles have not bee well combined. System architect looks like the most in-demand job, but below I disproved this.

I searched for job titles that contained the word ‘desk’ and found a mass of related roles. The different job names reflect more the changing trends in job titles, less the change in job type. There has been a move from help desk to service desk in this sector, but the same people are doing the role. A count of 16 job titles returned with a sum of 2000 of ads, making this by far the most prolific job placements at 6% of the total. The job descriptions also give me hope that there is a considerable opportunity for career progression within this bracket. See TABLE 1a.

Similarly, accounting for the variation in the naming of front-end developer positions reveals a much healthier count for this role. Together, jobs containing the term ‘front’ sum to 1197 job placements. At 4% of the total, a substantial lead to systems architect. See TABLE 1b.

The other thing entirely missing from this list is salary. There may have only been 50 IT Security Analyst listed in the last year, but, say their salary is $250K annually, perhaps this is precisely the type of job a graduate should be aiming to progress towards.

### Jobs

Within our group, we have four types of jobs we are interested in pursuing.

* Full-stack developer
* C++ Engineer (Gameplay Programmer)
* Cyber-security
* IoT engineer

Full-stack developers should have developed skills in front end and back end frameworks. I accumulated a list of front-end, back end, cloud and database type roles that are encompassed by the term ‘full-stack’. The total is 2750 job adds. At 9% of all listings, this is a healthy line of business. See Table 2.

General variants on the developer theme, and outside of those already counted, totalled 6030 jobs (around 20%) Table 3.

Gameplay and C+ engineers have few listings. There are no Game developers and only 90 C language positions.

Cyber-security. Looking for jobs containing ‘security’ returns a list of 900 jobs. At 3% of the total, this too is a big hitter, and with options for career progression - Table 4.

The is nothing in the list for IoT engineer, making it a boutique line of work.

## Reconsider Job Interests

TABLE1: a less dramatic way to rank Job title advertisements

|  |  |  |  |
| --- | --- | --- | --- |
| **Rank** | **percentage of total jobs listed** | **Count of Job titles** | **Sum of Job Postings** |
| 1 | 0.033 | 1 | 987 |
| 2 | 0.03 | 1 | 887 |
| 3 | 0.027 | 1 | 808 |
| 4 | 0.026 | 2 | 1565 |
| 5 | 0.025 | 1 | 738 |
| 6 | 0.024 | 1 | 713 |
| 7 | 0.023 | 1 | 681 |
| 8 | 0.022 | 1 | 666 |
| 9 | 0.019 | 1 | 555 |
| 10 | 0.018 | 1 | 539 |
| 11 | 0.016 | 3 | 1423 |
| 12 | 0.013 | 2 | 752 |
| 13 | 0.012 | 1 | 344 |
| 14 | 0.011 | 4 | 1327 |
| 15 | 0.01 | 1 | 303 |
| 16 | 0.009 | 4 | 1101 |
| 17 | 0.008 | 6 | 1401 |
| 18 | 0.007 | 3 | 649 |
| 19 | 0.006 | 10 | 1775 |
| 20 | 0.005 | 13 | 1926 |
| 21 | 0.004 | 25 | 2885 |
| 22 | 0.003 | 34 | 3017 |
| 23 | 0.002 | 70 | 4065 |
| 24 | 0.001 | 13 | 562 |
| **Grand Total** | | **200** | **29669** |

TABLE 1a: Work in the Help service sphere

|  |  |
| --- | --- |
| **Title** | **Job Postings** |
| Service Desk Analyst | 779 |
| Desktop Support Analyst | 164 |
| Desktop Support Engineer | 162 |
| Desktop Support | 127 |
| Service Desk Officer | 112 |
| It Service Desk Analyst | 108 |
| Help Desk Analyst | 95 |
| Desktop Support Officer | 92 |
| Help Desk Officer | 58 |
| Service Desk Consultant | 57 |
| Desktop Engineer | 56 |
| Help Desk Support | 52 |
| Service Desk Technician | 51 |
| It Help Desk Support | 47 |
| Service Desk | 46 |
| It Help Desk | 42 |
| **TOTAL** | **2048** |
| **Pct** | **7%** |

**TABLE 1b: positions including the name ‘full’**

|  |  |
| --- | --- |
| **Title** | **Job Postings** |
| Full Stack Developer | 344 |
| Full Stack Java Developer | 115 |
| Full Stack .Net Developer | 113 |
| Senior Full Stack Developer | 98 |
| Full Stack Web Developer | 49 |
| **TOTAL** | **719** |
| **Pct** | **2%** |

TABLE2: Roles available for full stack developers

|  |  |
| --- | --- |
| **Job title** | **ad counts** |
| Full-Stack Developer | 344 |
| Full Stack Java Developer | 115 |
| Full Stack .Net Developer | 113 |
| Senior Full Stack Developer | 98 |
| Full Stack Web Developer | 49 |
| Front End Developer 1 | 738 |
| Senior Front End Developer | 303 |
| Front End Web Developer | 85 |
| Frontend Developer 2 | 71 |
| Cloud Engineer | 65 |
| Cloud Architect | 58 |
| Database Administrator | 238 |
| Data Engineer | 182 |
| Data Architect | 162 |
| Data Administrator | 82 |
| Data Warehouse Developer | 44 |
| **TOTAL** | **2747** |
| **Pct** | **9%** |

TABLE 3: roles for developers

|  |  |
| --- | --- |
| **Title** | **Job Postings** |
| .Net Developer | 808 |
| Java Developer | 713 |
| Senior Net Developer | 481 |
| Senior Java Developer | 478 |
| Software Developer | 337 |
| Developer | 278 |
| Php Developer | 277 |
| Senior Developer | 243 |
| Ios Developer | 227 |
| Senior Software Developer | 178 |
| Android Developer | 171 |
| Senior Php Developer | 143 |
| Senior Ios Developer | 119 |
| Javascript Developer | 113 |
| Python Developer | 106 |
| Integration Developer | 101 |
| Ruby On Rails Developer | 99 |
| Etl Developer | 94 |
| Application Developer | 92 |
| Drupal Developer | 89 |
| Mobile Developer | 82 |
| Mobile Applications Developer | 76 |
| Senior Android Developer | 72 |
| Sap Abap Developer | 69 |
| Hadoop Developer | 66 |
| Junior Developer | 66 |
| Lead Developer | 61 |
| Junior Net Developer | 58 |
| Mid-Level .Net Developer | 54 |
| Salesforce Developer | 50 |
| Graduate Software Developer | 48 |
| Senior Drupal Developer | 48 |
| Oracle Developer | 47 |
| Aem Developer | 44 |
| .Net Web Developer | 42 |
| **TOTAL** | **6030** |
| **Pct** | **20%** |

TABLE4: Roles available in the security field

|  |  |
| --- | --- |
| **Title** | **Job Postings** |
| Security Analyst | 173 |
| Security Architect | 142 |
| Security Consultant | 107 |
| Information Security Manager | 91 |
| Senior Security Consultant | 73 |
| Network Security Engineer | 72 |
| Security Engineer | 70 |
| Information Security Consultant | 59 |
| Information Security Analyst | 58 |
| It Security Analyst | 51 |
| Security Manager | 50 |
| **TOTAL** | **946** |
| **Pct** | **3%** |