



Vulnerabilities findings

SkillsBridge

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System Architecture :

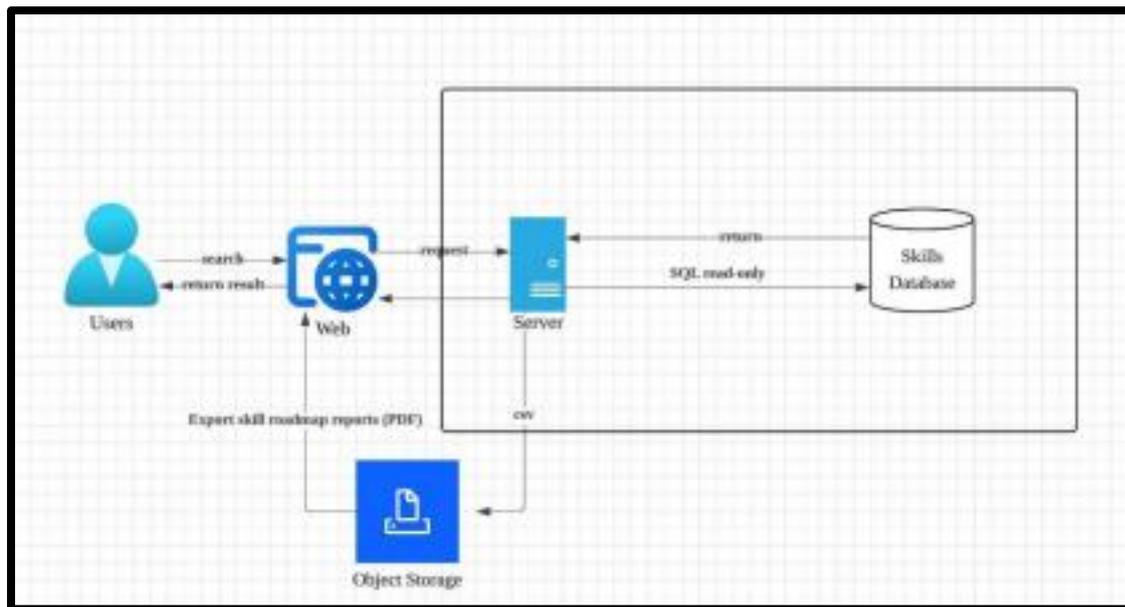


Fig 1

Problem Statement

In Australia, many people spend years, sometimes decades working in the same field. When they decide to change direction, the process often feels daunting. Workers are unsure which roles might suit their abilities, whether their current skills are still relevant, and what training could realistically help them secure a new position. At present, useful information is scattered across job boards, blogs, government sites, and training providers. Without a clear guide, mid career workers can end up frustrated, underemployed, or stepping into roles that don't make use of their strengths. There is a clear need for a single platform that allows people to explore new industries, understand the skills they already bring to the table, identify what is missing, and connect with practical training and support to make a career transition achievable.

Epic 5 – Industry Trend Insights

Description:

Provide long-term employment and salary trends with five-year forecasts, using open datasets and interactive dashboards.

Epic 6 – Career Jargon Decoder

Description:

Provide a jargon and acronym dictionary for job seekers, across multiple sectors, with plain-language explanations.

Security Testing

Nmap:

Nmap is a powerful open-source tool used for network discovery and security auditing. It scans hosts and services on a network to identify open ports, running services, operating system details, and potential vulnerabilities. Nmap supports advanced features such as OS fingerprinting, version detection, vulnerability scripts, and traceroute. Security professionals commonly use it for reconnaissance during penetration testing to map the attack surface of a target system.

Nmap Findings:

1. Basic Port Scan

```
(root@kali)-[~/home/jeff]
└─# nmap skill-bridge-ruddy-sigma.vercel.app
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-13 11:34 AEDT
Nmap scan report for skill-bridge-ruddy-sigma.vercel.app (216.198.79.3)
Host is up (0.030s latency).
Other addresses for skill-bridge-ruddy-sigma.vercel.app (not scanned): 64.29.17.3
Not shown: 998 filtered tcp ports (no-response)
PORT      STATE SERVICE
80/tcp    open  http
443/tcp   open  https

Nmap done: 1 IP address (1 host up) scanned in 9.60 seconds
```

Fig 2

2. Service Version Detection

Fig 4

3. Safe Default Scripts

```
└─# nmap -sC skill-bridge-ruddy-sigma.vercel.app
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-13 11:38 AEDT
Nmap scan report for skill-bridge-ruddy-sigma.vercel.app (64.29.17.3)
Host is up (0.011s latency).
Other addresses for skill-bridge-ruddy-sigma.vercel.app (not scanned): 216.198.79.3
Not shown: 998 filtered tcp ports (no-response)
PORT      STATE SERVICE
80/tcp    open  http
|_http-title: Site doesn't have a title (text/plain).
443/tcp   open  https
|_ssl-cert: Subject: commonName=*.vercel.app
|_ Subject Alternative Name: DNS:*.vercel.app, DNS:vercel.app
|_ Not valid before: 2025-08-24T16:25:33
|_ Not valid after: 2025-11-22T16:25:32
|_ http-title: SkillBridge
Nmap done: 1 IP address (1 host up) scanned in 12.78 seconds
```

Fig 5

4. Top 100 Common Ports

```
└─(root@kali)-[~/home/jeff]
└─# nmap --top-ports 100 skill-bridge-ruddy-sigma.vercel.app
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-13 11:40 AEDT
Nmap scan report for skill-bridge-ruddy-sigma.vercel.app (216.198.79.3)
Host is up (0.034s latency).
Other addresses for skill-bridge-ruddy-sigma.vercel.app (not scanned): 64.29.17.3
Not shown: 98 filtered tcp ports (no-response)
PORT      STATE SERVICE
80/tcp    open  http
443/tcp   open  https
Nmap done: 1 IP address (1 host up) scanned in 3.57 seconds
```

Fig 6

5. SSL/TLS Cipher Security Check

```
└─# nmap --script ssl-enum-ciphers -p 443 skill-bridge-ruddy-sigma.vercel.app
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-13 11:42 AEDT
Nmap scan report for skill-bridge-ruddy-sigma.vercel.app (64.29.17.3)
Host is up (0.014s latency).
Other addresses for skill-bridge-ruddy-sigma.vercel.app (not scanned): 216.198.79.3

PORT      STATE SERVICE
443/tcp   open  https
| ssl-enum-ciphers:
|   TLSv1.2:
|     ciphers:
|       TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256 (secp256r1) - A
|       TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256 (secp256r1) - A
|       TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384 (secp256r1) - A
|       TLS_DHE_RSA_WITH_AES_256_GCM_SHA384 (dh 2048) - A
|     compressors:
|       NULL
|     cipher preference: server
|   TLSv1.3:
|     ciphers:
|       TLS_AKE_WITH_AES_128_GCM_SHA256 (ecdhe_x25519) - A
|       TLS_AKE_WITH_AES_256_GCM_SHA384 (ecdhe_x25519) - A
|       TLS_AKE_WITH_CHACHA20_POLY1305_SHA256 (ecdhe_x25519) - A
|     cipher preference: server
|_  least strength: A

Nmap done: 1 IP address (1 host up) scanned in 3.34 seconds
```

Fig 7

6. SSL Certificate Information

```
└─# nmap --script ssl-cert -p 443 skill-bridge-ruddy-sigma.vercel.app
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-13 11:43 AEDT
Nmap scan report for skill-bridge-ruddy-sigma.vercel.app (216.198.79.3)
Host is up (0.0021s latency).
Other addresses for skill-bridge-ruddy-sigma.vercel.app (not scanned): 64.29.17.3

PORT      STATE SERVICE
443/tcp   filtered https

Nmap done: 1 IP address (1 host up) scanned in 1.87 seconds
```

Fig 8

7. HTTP Security Headers Check

```

(root@kali)-[~/home/jeff]
└─# nmap --script http-security-headers skill-bridge-ruddy-sigma.vercel.app
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-13 11:45 AEDT
Nmap scan report for skill-bridge-ruddy-sigma.vercel.app (64.29.17.195)
Host is up (0.0053s latency).
Other addresses for skill-bridge-ruddy-sigma.vercel.app (not scanned): 216.198.79.195
Not shown: 998 filtered tcp ports (no-response)
Bug in http-security-headers: no string output.
PORT      STATE SERVICE
80/tcp    open  http
443/tcp   open  https
| http-security-headers:
|   Strict_Transport_Security:
|   HSTS not configured in HTTPS Server
|   Cache_Control:
|_  Header: Cache-Control: private, no-store, max-age=0
Nmap done: 1 IP address (1 host up) scanned in 7.23 seconds

```

Fig 9

8. HTTP Methods Check

```

(root@kali)-[~/home/jeff]
└─# nmap --script http-methods skill-bridge-ruddy-sigma.vercel.app
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-13 11:46 AEDT
Nmap scan report for skill-bridge-ruddy-sigma.vercel.app (216.198.79.195)
Host is up (0.0054s latency).
Other addresses for skill-bridge-ruddy-sigma.vercel.app (not scanned): 64.29.17.195
Not shown: 998 filtered tcp ports (no-response)
PORT      STATE SERVICE
80/tcp    open  http
443/tcp   open  https
| http-methods:
|_  Supported Methods: GET HEAD POST OPTIONS
Nmap done: 1 IP address (1 host up) scanned in 7.01 seconds

```

Fig 10

9. XSS Detection

```

(root@kali)-[~/home/jeff]
└─# nmap --script http-stored-xss skill-bridge-ruddy-sigma.vercel.app
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-13 11:48 AEDT
Nmap scan report for skill-bridge-ruddy-sigma.vercel.app (64.29.17.195)
Host is up (0.0070s latency).
Other addresses for skill-bridge-ruddy-sigma.vercel.app (not scanned): 216.198.79.195
Not shown: 998 filtered tcp ports (no-response)
PORT      STATE SERVICE
80/tcp    open  http
|_http-stored-xss: Couldn't find any stored XSS vulnerabilities.
443/tcp   open  https
|_http-stored-xss: Couldn't find any stored XSS vulnerabilities.
Nmap done: 1 IP address (1 host up) scanned in 5.68 seconds

```

Fig 11

10. SQL Injection Detection


```

[~/home/jeff] --/home/jeff
nikto -h skill-bridge-ruddy-sigma.vercel.app -tuning 5
Nikto v2.5.0
-----
Multiple IPs found: 216.198.79.3, 64.29.17.3
Target IP: 216.198.79.3
Target Hostname: skill-bridge-ruddy-sigma.vercel.app
Target Port: 80
Start Time: 2025-10-13 12:29:50 (GMT+1)
-----
Server: Vercel
/: The anti-clickjacking X-Frame-Options header is not present. See: https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options
/: Uncommon header 'refresh' found, with contents: 0url=https://skill-bridge-ruddy-sigma.vercel.app/.
/: The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type. See: https://www.netsparker.com/web-vulnerability-scanner/vulnerabilities/missing-content-type-header/
* Root page / redirects to: https://skill-bridge-ruddy-sigma.vercel.app/
* No CGI Directories found (use '-C all' to force check all possible dirs)
*/skill-bridge-ruddy-sigma.zip: IP address found in the 'x-vercel-id' header. The IP is 'd1:2'. See: https://portswigger.net/kb/issues/00600300_private-ip-addresses-disclosed
*/skill-bridge-ruddy-sigma.zip: Uncommon header 'x-vercel-id' found, with contents: syd1:2h2tk-1760319014634-1b516a3da881.
*/: Uncommon header 'x-vercel-error' found, with contents: DEPLOYMENT_NOT_FOUND.
* 785 requests: 2 error(s) and 6 item(s) reported on remote host
End Time: 2025-10-13 12:30:57 (GMT+1) (67 seconds)
-----
1 host(s) tested

```

Fig 19

8. SQL Injection Scan

```

[~/home/jeff] --/home/jeff
nikto -h skill-bridge-ruddy-sigma.vercel.app -tuning 9
Nikto v2.5.0
-----
Multiple IPs found: 216.198.79.3, 64.29.17.3
Target IP: 216.198.79.3
Target Hostname: skill-bridge-ruddy-sigma.vercel.app
Target Port: 80
Start Time: 2025-10-13 12:31:20 (GMT+1)
-----
Server: Vercel
/: The anti-clickjacking X-Frame-Options header is not present. See: https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options
/: Uncommon header 'refresh' found, with contents: 0url=https://skill-bridge-ruddy-sigma.vercel.app/.
/: The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type. See: https://www.netsparker.com/web-vulnerability-scanner/vulnerabilities/missing-content-type-header/
* Root page / redirects to: https://skill-bridge-ruddy-sigma.vercel.app/
* No CGI Directories found (use '-C all' to force check all possible dirs)
*/skill-bridge-ruddy-sigma.vercel.egg: IP address found in the 'x-vercel-id' header. The IP is 'd1:.'. See: https://portswigger.net/kb/issues/00600300_private-ip-addresses-disclosed
*/skill-bridge-ruddy-sigma.vercel.egg: Uncommon header 'x-vercel-id' found, with contents: syd1:g45j6-1760319131565-a1736a8d64fe.
*/: Uncommon header 'x-vercel-error' found, with contents: DEPLOYMENT_NOT_FOUND.
* 782 requests: 2 error(s) and 6 item(s) reported on remote host
End Time: 2025-10-13 12:32:50 (GMT+1) (59 seconds)
-----
1 host(s) tested

```

Fig 20

Burpsuite:

Burp Suite is an integrated platform and industry-standard toolkit for performing security testing of web applications. It acts as an intercepting proxy that sits between your browser and the target application, allowing security testers to view, analyse, and modify HTTP/HTTPS traffic in real-time.

Burpsuite Findings (SQL Injection):

1. s=farmer'

Request		Response	
Pretty	Raw	Pretty	Raw
1	GET /anzsco/search?industry=Agriculture%2C+Forestry+and+Fishing&s=farmer'&limit=12	1	HTTP/2 200 OK
2	HTTP/2	2	Date: Mon, 13 Oct 2025 10:34:02 GMT
3	Host: thorough-annalise-fit5120-fc5e9971.koyeb.app	3	Content-Type: application/json; charset=utf-8
4	Sec-Ch-Ua-Platform: "Linux"	4	Access-Control-Allow-Origin: https://skill-bridge-ruddy-sigma.vercel.app
5	Accept-Language: en-GB,en;q=0.9	5	Vary: Origin
6	Accept: application/json	6	Access-Control-Allow-Credentials: true
7	Sec-Ch-Ua: "Chromium";v="139", "Not=A;Brand";v="99"	7	Content-Security-Policy: default-src 'self';connect-src 'self' http: https: *.koyeb.app http://localhost:5173 http://localhost:3000 http://localhost:8080 https://skill-bridge-ruddy-sigma.vercel.app;img-src 'self' data:;script-src 'self';style-src 'self' 'unsafe-inline';frame-ancestors 'none';base-uri 'self';font-src 'self' https: data:;form-action 'self';object-src 'none';script-src-attr 'none';upgrade-insecure-requests
8	User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/139.0.0.0 Safari/537.36	8	Cross-Origin-Opener-Policy: same-origin
9	Sec-Ch-Ua-Mobile: ?0	9	Cross-Origin-Resource-Policy: cross-origin
10	Origin: https://skill-bridge-ruddy-sigma.vercel.app	10	Origin-Agent-Cluster: ?1
11	Sec-Fetch-Site: cross-site	11	Referer-Policy: no-referrer
12	Sec-Fetch-Mode: cors	12	Strict-Transport-Security: max-age=31536000; includeSubDomains
13	Sec-Fetch-Dest: empty	13	X-Content-Type-Options: nosniff
14	Sec-Fetch-Storage: Access: active	14	X-Dns-Prefetch-Control: off
15	Referer: https://skill-bridge-ruddy-sigma.vercel.app/	15	X-Download-Options: noopen
16	Accept-Encoding: gzip, deflate, br	16	X-Frame-Options: SAMEORIGIN
17	Priority: u=1, i	17	X-Permitted-Cross-Domain-Policies: none
18		18	X-Xss-Protection: 0
19		19	Etag: W/"3b-7eC7WY4XF0cLU8Px28XV2QuvUdg"
20		20	X-Envoy-Upstream-Service-Time: 98
21		21	X-Koyeb-Backend: sin
22		22	Server: cloudflare

Fig 21

2. s=1'

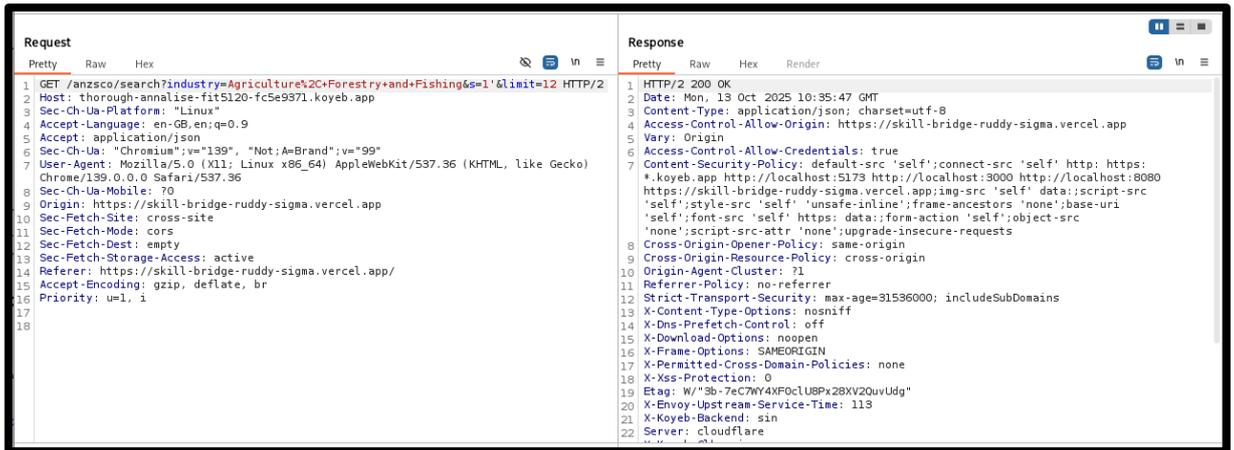


Fig 22

3. s=farm

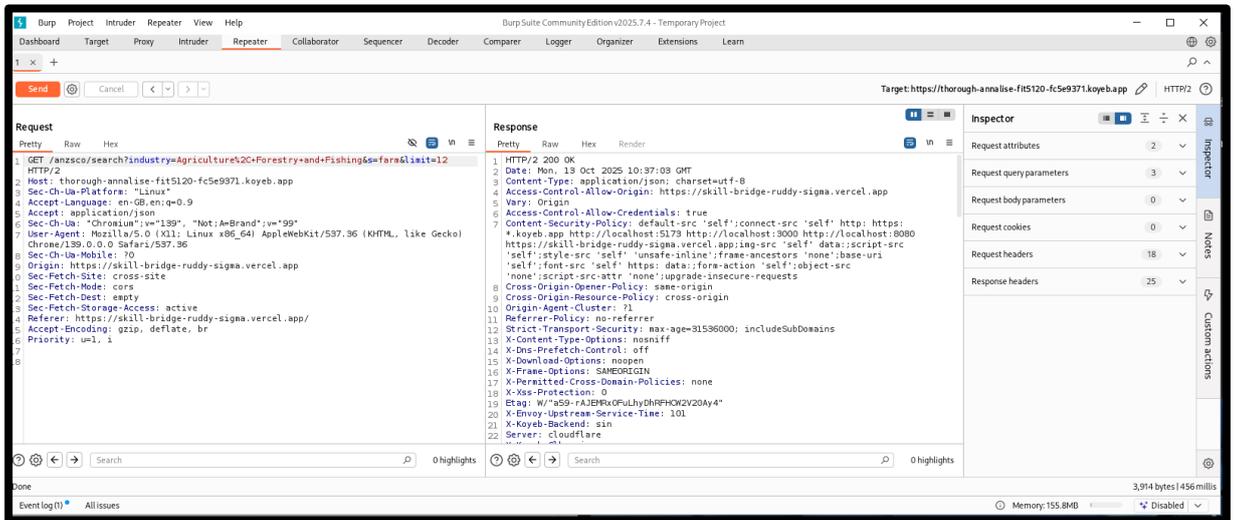


Fig 23

4. s=Goat farmer OR 1'=1

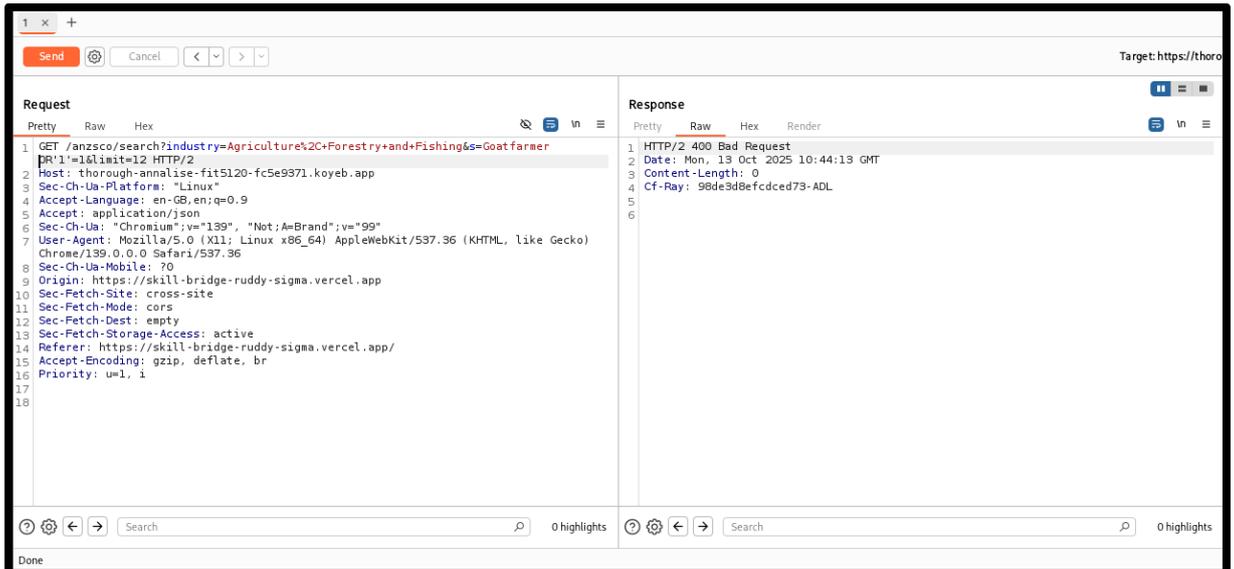


Fig 24

5. s=OR'1'=1

