

**Yes — same exact setup for Crawl4AI on Render free tier.**

Unlimited private web crawling (markdown, JSON, screenshots, structured data, deep crawls, etc.) for your AI agents, no API costs, full privacy.

Crawl4AI complements your SearXNG perfectly — use SearXNG for search, Crawl4AI for deep page scraping.

## 1. Create One GitHub Repo ( `crawl4ai-render` )

Go to GitHub → New repo → Name: `crawl4ai-render`

Add these **3 files**:

### Dockerfile

```
dockerfile

FROM unclocode/crawl4ai:latest

# Render free tier fixes (dynamic $PORT + no rate limits)
COPY config.yml /app/config.yml
COPY entrypoint.sh /entrypoint.sh

RUN chmod +x /entrypoint.sh && \
    apt-get update && apt-get install -y sed && rm -rf \
/var/lib/apt/lists/*

ENTRYPOINT ["/entrypoint.sh"]
```

### entrypoint.sh

Bash

```
#!/bin/sh
```

```
set -e
```

```
# Make it listen on Render's dynamic $PORT
```

```
sed -i "s/port: 11235/port: ${PORT}/g" /app/config.yml
```

```
echo "🚀 Crawl4AI starting on port $PORT (Render free tier)"
```

```
# Run the official server
```

```
exec "$@"
```

**config.yml (maxed out for unlimited + free tier)**

YAML

```
app:
  host: "0.0.0.0"
  port: 11235    # ← Will be auto-changed to $PORT by entrypoint

llm:
  provider: "openai/gpt-4o-mini"    # Change to your preferred (or leave
blank)

security:
  enabled: false                    # No auth for personal use
  jwt_enabled: false

rate_limiting:
  enabled: false                    # ← UNLIMITED CALLS

crawler:
  memory_threshold_percent: 85.0    # Gentle on free tier RAM
  timeouts:
    stream_init: 60.0
    batch_process: 600.0

# Optional: Enable everything
browser:
  pool_size: 2                      # Keep light for free tier
  headless: true
```

Commit & push.

## 2. Deploy on Render (Free)

1. Go to [dashboard.render.com](https://dashboard.render.com) → **New** → **Web Service**
2. Connect your `crawl4ai-render` repo
3. **Name:** `crawl4ai` (or anything)
4. **Branch:** `main`
5. **Runtime:** **Docker**
6. **Instance Type:** **Free**
7. **Environment Variables** (add these):
  - `OPENAI_API_KEY` → your key (for LLM extraction, optional)
  - `ANTHROPIC_API_KEY` → optional
  - Any other LLM keys you use
8. Click **Create Web Service**

Wait 3–5 minutes for build (it pulls the official image + applies our tweaks).

### 3. First-Time Fix (Important)

After first deploy:

- Go to your service → **Environment** tab
- Update any env vars if needed
- Click **Redeploy**

### 4. Test It

- **Web UI (Playground):** <https://crawl4ai-xxx.onrender.com/playground/>
- **Health:** <https://crawl4ai-xxx.onrender.com/health>
- **Simple crawl (via curl):**

Bash

```
curl -X POST https://crawl4ai-xxx.onrender.com/crawl \
  -H "Content-Type: application/json" \
  -d '{"urls": ["https://example.com"], "extract": {"type": "markdown"}}'
```

- **MCP ready (for later):** /mcp/sse

## Keep it Awake (Free UptimeRobot)

Same as SearXNG:

• Add monitor for <https://your-crawl4ai.onrender.com/health> → every 5 min

## Free Tier Notes (Same as SearXNG)

• 750 hours/month → fine for one service and occasional crawls

- Sleeps after 15 min → UptimeRobot prevents it

• 512MB RAM → good for personal crawls (deep crawls may be slower)

- No persistent storage → configs baked in (edit config.yml → push → redeploy)

Done in 10 minutes.

Your stack is now good tier:

- SearXNG → unlimited search

- Crawl4AI → unlimited deep crawling

When you want to connect to MCP, add a custom endpoint. Just say the word — 2 minute setup.

Ping me with the Render URL when live, I'll test a heavy crawl for you.