



Image SEO Guide — Full Compact Version

Audience: content creators, site owners, and in-house SEOs who want practical, repeatable image optimizations that improve load speed, accessibility, and search visibility.

Quick TL;DR checklist (paste this at the front)

- Filename: descriptive, hyphenated, include keyword where natural (no stopwords).
- Alt text: short, descriptive sentence/phrase; include primary keyword only when relevant.
- LCP image: prioritize quality + smallest possible file size; do NOT lazy-load LCP image.
- Format: use AVIF/WebP for modern browsers, fallback to optimized JPEG/PNG/SVG as needed.
- Responsive: use srcset + sizes or with multiple resolutions/formats.
- Dimensions: include width & height attributes or aspect-ratio CSS to avoid CLS.
- Compression: lossy for photos, lossless for graphics when needed; test visual quality.
- CDN & cache: serve via CDN, use long cache TTLs + cache busting on updates.
- Structured data: include ImageObject in JSON-LD when relevant.
- Sitemap: include key images in XML sitemap if important for discovery.
- Accessibility: captions, longdesc (or link), and ARIA where appropriate.
- Publish flow: optimize locally → upload multiple sizes/formats → add srcset/sizes → add alt + caption + schema → test (Lighthouse) → publish → monitor LCP.

1) One-line goal

Make images lightweight, responsive, descriptive, and crawlable — improving UX, LCP, and image search visibility while preserving visual quality.

1.1 What counts as image SEO

- File naming, alt text, captions, structured data, responsive markup, formats, compression, CDN/caching, and indexability.

2) File formats & when to use them

- AVIF — Best compression & quality for photos; use where supported.
- WebP — Excellent modern alternative; good browser coverage.
- JPEG (progressive) — Fallback for photos; widely supported.
- PNG — Use for images requiring lossless quality (logos, icons with transparency).
- SVG — Best for vector graphics (icons, logos) — tiny filesize if optimized.
- GIF — Rarely use; prefer MP4/WebM for animation.
- Note: Serve AVIF/WebP first via or srcset; always include a reliable fallback.

3) Filenames & URL structure (practical rules)

- Use lowercase, hyphen-separated, short & descriptive.
Example: mountain-hiking-trail-image-2025.jpg
- Avoid: spaces, underscores, generic names (IMG_1234), long query strings in filenames.
- If image is tied to a content slug, mirror the slug as appropriate:
/wp-content/uploads/2025/09/article-slug-image-1.webp

4) Alt text — templates & examples

- Purpose: describe the image for accessibility and provide contextual relevance. Keep concise.
- Templates:
 - [Primary keyword] + short descriptor — when image directly illustrates the keyword.
Example: "image SEO checklist" → alt="image SEO checklist example"
 - Functional/CTA images:
 - Decorative (no meaning): alt="" (empty string) and role="presentation"
 - Button/image link: describe the action — alt="Download image SEO checklist"
 - Complex images (charts/infographics): short summary + link to full description (use longdesc or a linked caption).
- Best practices:
 - Keep alt under ~125 characters.
 - Avoid keyword stuffing; be descriptive and helpful.
 - Use empty alt for purely decorative images to avoid noise for screen readers.

5) Responsive images (srcset / sizes / picture)

- Use multiple sizes and let the browser pick the best one. Example with srcset:

html

Copy

```

```

- Preferred pattern for modern format + fallback using :

html

Copy

```
<picture>  
  <source type="image/avif" srcset="/images/example-800.avif 800w,  
  /images/example-1200.avif 1200w" sizes="...">  
  <source type="image/webp" srcset="/images/example-800.webp 800w,  
  /images/example-1200.webp 1200w" sizes="...">  
    
</picture>
```

- Benefit: smaller payload for mobile, better image quality for capable browsers.

6) LCP image & lazy loading rules

- LCP (Largest Contentful Paint) image MUST be prioritized:
 - Do not use lazy loading for your LCP image.
 - Preload LCP image if critical:
 - Add width & height attributes to prevent layout shift.
- Lazy-load non-critical below-the-fold images:
 - Use native loading="lazy" attribute for most images.
 - For responsiveness, ensure loading="lazy" on inside works in modern browsers.

7) Compression & quality tradeoffs

- Compress wisely: test visual quality at various compression levels.
- Tools:
 - Batch: Squoosh, ImageOptim, MozJPEG, Guetzli, cwebp, avifenc.
 - Online: TinyPNG/TinyJPG, Squoosh.app, Cloudinary for on-the-fly transforms.
- Rules:
 - Photos: aim for 60–80% visual quality in JPEG or equivalent – balance filesize vs. quality.
 - Graphics: use lossless or PNG-8 where necessary; reduce colors if possible.
 - Use progressive JPEGs for perceived load speed.

8) CDN, caching, cache busting

- Serve images via a CDN for global speed.
- Set long cache headers (Cache-Control: public, max-age=31536000) and update filename or add a version query param on change (filename versioning preferred).
- Use immutable caching for hashed filenames (e.g., hero-abc123.webp) to avoid cache issues.

9) Image sitemaps & indexability

- Include important images in your XML sitemap if they're key to discovery (especially if loaded by JS or large galleries).
- Example sitemap snippet:

xml

```

<url>

  <loc>https://example.com/article</loc>

  <image:image>

    <image:loc>https://example.com/images/hero-1200.webp</image:loc>

    <image:caption>Image SEO hero example</image:caption>

  </image:image>

</url>

```

- Note: Google can index images from HTML too — sitemap inclusion helps for large/image-heavy sites.

10) Structured data for images

- When image is a core part of content, include ImageObject in Article schema:

json

```

{
  "@context": "https://schema.org",
  "@type": "Article",
  "headline": "Image SEO Best Practices",
  "image": {
    "@type": "ImageObject",
    "url": "https://www.chrisdaniel.com/images/hero-1200.webp",
    "width": 1200,
    "height": 800,
    "caption": "Example of optimized hero image"
  },
  "mainEntityOfPage":
    "https://www.chrisdaniel.com/resources/image-seo-guide.pdf"
}

```

}

- Use FAQ/HowTo schema when relevant; ensure images referenced exist on the page and are visible to users.

11) Accessibility & captions

- Use captions for images that add context (not just alt text). Captions are read and visible to users — helpful for both UX and SEO.
- For complex images provide a longer text description (linked longdesc or inline expanded text).
- Use ARIA sparingly; prefer semantic HTML (figure + figcaption):

html

Copy

```
<figure>
```

```
  
```

```
  <figcaption>Traffic doubled after implementing image compression
  and responsive images.</figcaption>
```

```
</figure>
```

12) CMS & publishing workflow (copy-ready checklist)

1. Source original image (highest quality).
2. Create derivatives: small/medium/large in AVIF/WebP/JPEG as required.
3. Optimize & compress each file.
4. Name files descriptively and upload to CDN or CMS.
5. Add width & height or use aspect-ratio CSS.
6. Add alt text, caption, and any structured data markup.
7. Add srcset/sizes or markup.
8. Preload hero/LCP image if needed.
9. Test page in Lighthouse and check LCP/CLS.
10. Publish, monitor metrics (LCP, CLS, search impressions for images).

13) Monitoring image performance

- Tools: Lighthouse, PageSpeed Insights, WebPageTest, Chrome DevTools (Performance tab), Search Console (Performance → Search type: Image for image search metrics), and CDN analytics.
- Key metrics: LCP, total image bytes, number of images, time to first byte (for CDN).
- Action: reduce largest images first, convert to modern formats, implement responsive images.

14) OG / Social thumbnails & meta

- Provide a dedicated social image (og:image) optimized for platforms:
 - Recommended size: 1200×630 (Twitter & Facebook good default).
 - Include brand & clear title text for share clarity.
- Add image meta:

html

Copy

```
<meta property="og:image"
content="https://www.chrisdaniel.com/images/og-v1.jpg">

<meta name="twitter:card" content="summary_large_image">

<meta name="twitter:image"
content="https://www.chrisdaniel.com/images/twitter-v1.jpg">
```

- Use unique social images per important article for better CTR.

15) Quick examples & alt text templates

- Hero photo: alt="primary keyword — short descriptor"
Example: alt="image SEO checklist example"
- Product photo: alt="brand model name, color, key spec"
Example: alt="Acme 2025 mountain bike, red, 29-inch"
- Infographic: alt="infographic summary: 5 steps to compress images" + link to long description
- Decorative: alt=""

16) Common pitfalls to avoid

- Lazy-loading LCP image.
- Missing width/height attributes (causes CLS).

- Using only a single large image without responsive variants.
 - Keyword stuffing in alt text.
 - Not using modern formats where feasible.
 - Serving large images without CDN or caching.
-

A bio card for Chris Daniel with an orange-to-brown gradient background. It features a logo on the left, a circular profile picture on the right, and contact information at the bottom right.

 **CHRIS DANIEL**
PROVING MY WORTH
BY INCREASING YOURS

With a Network administration background, this former Insurance Claims Adjuster has a knack for investigations mixed with a touch of dark and self-deprecating humor. Chris shares insights on social media strategies, insurance claims, investing and others. He blends technical know-how with real-world experience. Learn more about him & his projects at [About page](#).




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