







Web Developer

HTML, CSS e Strumenti di Digital Marketing (SEO, SEM, SEA)

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Image optimization

On-page seo

Shadi Lahham - Web development

Image optimization

WebP

Superior compression

WebP uses both lossy and lossless compression, resulting in smaller file sizes which translates to faster page loads and reduced data usage

Transparency support

WebP supports alpha channels, allowing transparent images similar to PNG but with smaller file sizes

Reduced page load times

smaller images load faster, improving user experience and potentially boosting SEO rankings

Browser compatibility

WebP is <u>supported</u> by popular browsers and to ensure compatibility with older browsers, websites often use .jpg.webp file extensions as WebP with a JPEG fallback; conditional loading or server-side optimization is recommended to handle these fallbacks

AVIF

Superior compression

AVIF typically achieves smaller file sizes than WebP without sacrificing quality

Wide color gamut

AVIF supports more vibrant and accurate colors, making it ideal for high-quality visuals

Transparency support

like WebP, AVIF supports transparent images, making it versatile for web use

Browser compatibility

AVIF is <u>supported</u> by popular browsers but some software applications don't support well yet while WebP is supported by more browsers and tools

SEO benefits

Improved page speed

smaller optimized image file sizes lead to faster loading times, which is crucial for SEO and user experience

Mobile optimization

optimized images ensure your website displays well on all devices, including smartphones

Social sharing

high-quality images are more likely to be shared on social media, driving traffic to your site

Conversion rates

visually appealing and optimized images can positively impact user engagement and conversions

Optimizing images for web

SEO considerations

Alt text

provides a text alternative for images, aiding accessibility and SEO, and accurate alt text can improve search engine visibility

Descriptive file names

use clear, keyword-rich file names to help search engines identify image content, further contributing to search engine visibility

File name: sunset-over-beach.jpg clearly describes the image content

Alt text: provides a detailed description for visually impaired users and search engines

SVG is SEO-friendly

Scalable Vector Graphics is a text-based format, offering smaller file sizes and responsive design without loss of quality, and search engines can crawl svg content, which improves visibility; integrating keywords within svgs can further enhance SEO

```
<svg width="200" height="150" viewBox="0 0 200 150">
    <title>Red Mountain Bike</title>
    <desc>A red mountain bike with a black frame and white tires.</desc>
    <g id="bike">
        <path d="M10,10 L10,100 L180,100 L180,10 Z" fill="red" stroke="black" stroke-width="2" />
        </g>
</svg>
```

Squoosh

<u>Squoosh</u> is a versatile online tool for optimizing, compressing and converting image formats

Image compression

quickly and easily compress images into WebP, AVIF and other formats

Quality comparison

visually compare the original image with its compressed versions to assess quality and compression

No batch processing :(

Squoosh can only handle one image at a time but there are workarounds online

A guide to google's Squoosh app Complete guide to Squoosh Squoosh video guide

Image optimization tools

Online

Compressor.io, TinyPNG, TinyJPG

Command line

powerful command-line tools for batch processing of images ImageMagick & GraphicsMagick

Apps

A macOS app that can batch optimize images ImageOptim

Image CDNs

Cloudinary - cloud-based image management and delivery platform
Imgix - cloud-based image CDN that provides on-demand image optimization and manipulation

Design software

Adobe Photoshop & GIMP support WebP

Try

use <u>Squoosh</u> with some high quality hi resolution images with a lot of detail

try the various formats including WebP and AVIF and play with the various quality options as well as the advanced settings