

# THE FUTURE OF THE THE WEB

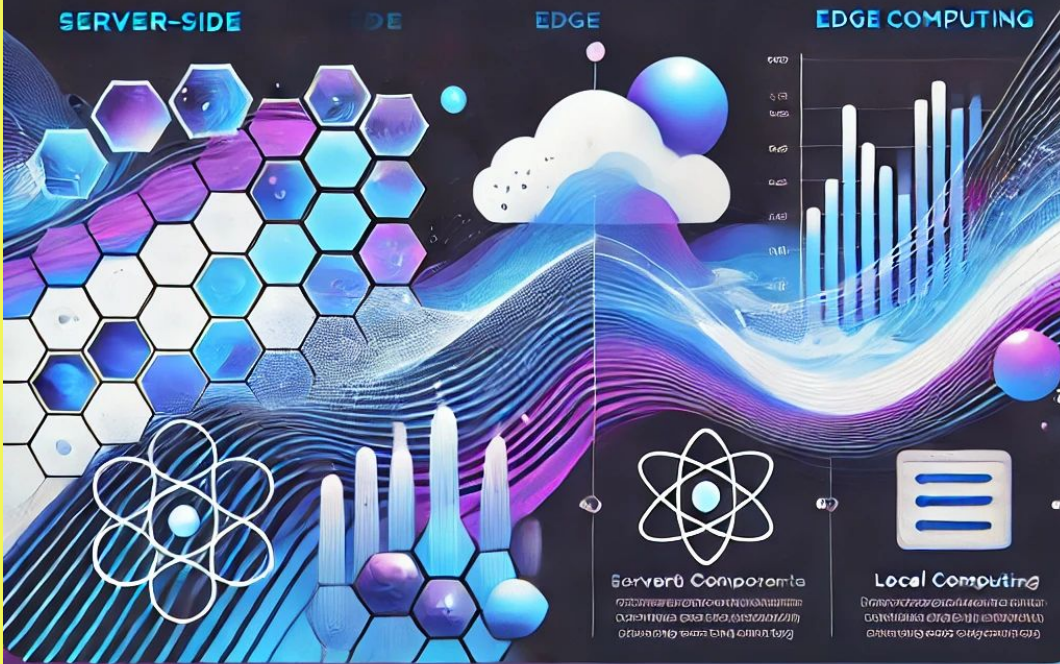
From Cloud to Components Using Edict to 'Edge  
Using , React 18, React, and React18, & NextJS 13

SERVER-SIDE

IDE

EDGE

EDGE COMPUTING



# *The Future of the Web: From Cloud to Edge using Server-Side Components, React 18, and Next.js 13*

*Embracing the Evolution of  
Web Development  
“Wazeema Amir”*

# Introduction

**Heading:** *What is Edge Computing?*

**Content:**

- Definition of Edge Computing.
- Benefits: reduced latency, enhanced user experience, better resource utilization.
- Key Trends: CDN (Content Delivery Networks) and Lambda functions.

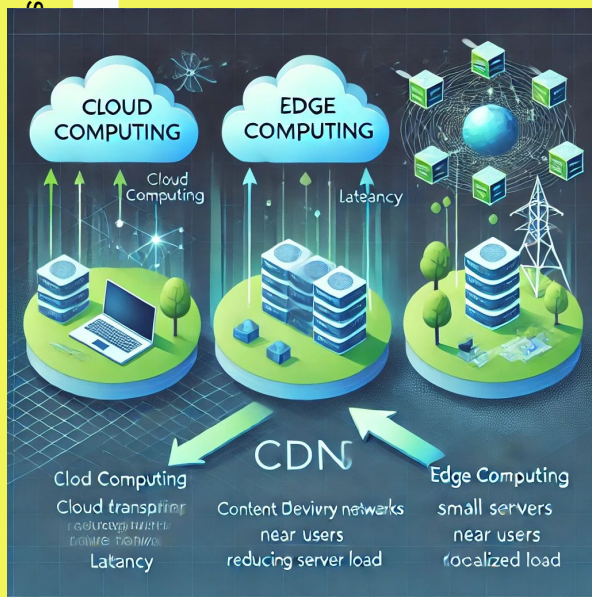
**Image/Graphic:** Diagram of Edge vs. Cloud Computing.





# Evolution of Web Development

- **Heading:** *From Cloud to Edge*
- **Content:**
  - Traditional Cloud Computing and its limitations (e.g., latency).
  - The role of CDNs in reducing server load.
  - Edge Computing as the next step.
- **Key Term:** Edge = Bringing computation closer to the user.



- **Heading:** *Revolutionizing Development*
- **Content:**
  - Introduction to React Server Components.
  - Benefits: Streamlined rendering, better user experience, and SEO.
  - Next.js 13 enhancements: server-rendered components, app directory, and edge-first optimizations.
- **Graphic:** Timeline or feature comparison between React 18 and Next.js 13.

# Key Tools & Technologies

- **Heading:** *Empowering Edge Development*
- **Content:**
  - **Vercel Edge Functions:** Serverless execution at the edge.
  - **PlanetScale:** Scalable, type-safe database access at the edge.
  - AI integration at the edge.
- **Graphic:** Ecosystem diagram showcasing React, Next.js, Vercel, and PlanetScale.

# Use Cases & Real-World Applications

- **Heading:** *Edge in Action*
- **Examples:**
  - Personalization at scale (e.g., dynamic user interfaces).
  - AI at the edge for real-time processing (Edge AI).
  - Edge-optimized e-commerce platforms.
- **Image:** Examples of applications or logos of companies using edge computing.



## Best Practices for Edge Computing

- **Heading:** *Navigating the Edge*
- **Content:**
  - Use CDNs strategically.
  - Optimize for server-side rendering.
  - Implement secure edge functions.
- **Graphic:** Checklist for edge computing adoption.

## Challenges & Considerations

- **Heading:** *Future Challenges*
- **Content:**
  - Network reliability at the edge.
  - Balancing cost and performance.
  - Ensuring data privacy and compliance.
- **Image:** Conceptual graphic of challenges (e.g., balancing scales).

## The Road Ahead

- **Heading:** *The Future of Edge Computing*
- **Content:**
  - Growing integration with AI and machine learning.
  - Enhanced developer tooling for edge-first architectures.
  - Increased adoption across industries.
- **Quote:** "The future is not in the cloud or the edge—it's a seamless combination of both."

## Conclusion

- **Heading:** *Conclusion*
- **Content:**
  - Edge Computing and tools like React 18 and Next.js 13 represent the next evolution of web development.
  - Developers must embrace this shift to deliver faster, smarter, and more scalable solutions.
- **Call to Action:** *Start building for the edge today!*