

Bodh Features Showcase

Beautiful presentations from markdown

{.columns}

Mathematics: Inline vs Display

Inline Mathematics

We can include math like $f(x) = ax^2 + bx + c$ directly in text, or more complex expressions like $\sum_{i=1}^n x_i^2$.

Display Mathematics

For more prominent equations, use display mode:

$$\int_{-\infty}^{\infty} e^{-x^2} dx = \sqrt{\pi}$$

$$\nabla f(x, y) = \left[\frac{\partial f}{\partial x} \quad \frac{\partial f}{\partial y} \right]$$

Lists and Formatting

Bullet Points

- **Bold text** for emphasis
- *Italic text* for style
- `Code snippets` inline
- [Links](#) for references

Numbered Lists

1. First important point
2. Second key concept
3. Third essential element
4. Final summary point

Code Highlighting

Python Example

```
def gradient_descent(f, grad_f, x0, alpha=0.01):  
    """Gradient descent optimization"""  
    x = x0  
    for i in range(1000):  
        x = x - alpha * grad_f(x)  
        if abs(grad_f(x)) < 1e-6:  
            break  
    return x
```

JavaScript Example

```
function createChart(data) {  
    return {  
        type: 'line',  
        data: data,  
    }  
}
```

Tables and Data

Simple Table

Method	Speed	Accuracy
SGD	Fast	85%
Adam	Medium	92%
L-BFGS	Slow	96%

Complex Table

Algorithm	Time Complexity	Space	Best Use Case
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Figures and Images

Simple Figure

Figure with Caption

 Beautiful landscape with mountains and trees creating a serene natural scene

Sized Image

 Bodh Logo

Blockquotes and Callouts



Important Note: *Gradient descent is a fundamental optimization algorithm used across machine learning, from linear regression to deep neural networks.*

"The best way to learn is by doing."

— Anonymous

Multiple Quote Levels

Advanced Typography

Text Styles

- **Bold emphasis**
- *Italic style*
- ~~Strikethrough text~~
- `Monospace code`
- Small caps: SMALL CAPS TEXT

Special Characters

- Mathematical: α , β , γ , Δ , Σ , π , ∞
- Arrows: \rightarrow \leftarrow \uparrow \downarrow \langle \rangle
- Symbols: ★ ✓ × ⚠ i

Interactive Elements

Progress Indicators

- \mathcal{X}
Feature implementation complete
- \mathcal{X}
Testing and validation done
- Documentation in progress
- Final review pending

Mathematical Showcases

Matrix Operations

$$A = \begin{bmatrix} a_{11} & a_{12} & a_{13} & a_{21} & a_{22} & a_{23} & a_{31} & a_{32} & a_{33} \end{bmatrix}$$

Complex Equations

$$\mathcal{L}(\theta) = \frac{1}{N} \sum_{i=1}^N \ell(f(x_i; \theta), y_i) + \lambda R(\theta)$$

Multi-line Equations

$$\begin{aligned} \nabla_{\theta} \mathcal{L} &= \frac{1}{N} \sum_{i=1}^N \nabla_{\theta} \ell \end{aligned}$$

Summary

What You've Seen

- ✓ **Multi-column layouts** for organized content
- ✓ **Inline and display mathematics** with LaTeX
- ✓ **Various list types** and formatting options
- ✓ **Code highlighting** for multiple languages
- ✓ **Tables** for data presentation
- ✓ **Images and figures** with flexible sizing
- ✓ **Typography** and special characters

Ready for Real Content

Now let's see these features in action with a complete example: **Gradient Descent Tutorial**