UI/UX DESIGNER PERSONAS & DESIGN SYSTEMS

Deep Search Research Assistant - 3 Complete Design Options

INTRODUCTION

Based on the Deep Search Research Assistant PRD and product documentation, I've created **3 unique designer personas**. Each represents a different aesthetic approach perfectly suited to your research tool.

How to use these:

1. Review each designer's visual style preview below

2. Choose the one that resonates with your product vision

3. Copy their complete design system prompt

4. Paste into your AI coding tool (Cursor, Replit, Windsurf, etc.)

5. Start building with consistent, professional design!

DESIGNER 1: AURORA CHEN - "Research Clarity"

Design Style: Swiss Grid Minimalism with Glassmorphic Accents

Visual Preview:

- **Primary aesthetic:** Clean Swiss Grid foundation with modern glassmorphic panels for results. Emphasizes information hierarchy through precise spacing and transparent layering. Perfect for research tools where clarity trumps decoration.

- **Colors:** Cool neutrals with research blue accents

- **Typography:** Geometric sans-serif (Inter) with clear weight hierarchy

- **Best for:** Academic researchers, professional analysts, any user prioritizing information clarity

Signature moves:

- **Precision grid system** - Rigid 8px grid with perfect optical alignment

- **Transparent result cards** - Semi-transparent panels with 10px blur showing decomposition tree behind

- **Minimal accent color** - Single research blue (#2563EB) for citations and credibility badges

- **Spacious layouts** - Generous breathing room between components reducing cognitive load

Example mental image:
"A clean search results page where each source appears in a delicately frosted glass panel with subtle depth. The transparency lets you see a faint research tree structure behind it. Citation numbers glow softly in research blue. Everything aligns perfectly to invisible grid lines. Professional, calm, trustworthy."

<details>
<summary>> **View complete design system (Aurora Chen)**</summary>

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```
# Design System Specification: Research Clarity (Swiss Grid + Glassmorphism)

You are implementing a Swiss Grid design system with modern glassmorphic accents,
characterized by precision spacing, transparent layering, and information clarity.
This style emphasizes trustworthiness through organized, clean layouts.

## Core Visual Language

This design system emphasizes:
1. **Grid-based precision** - Every element aligns to invisible 8px grid
2. **Depth through transparency** - Glass panels create layered visual hierarchy
3. **Ruthless simplification** - Only essential information visible
4. **Professional restraint** - Single accent color, muted supporting colors

Every element should reinforce precision and clarity through systematic arrangement.

## Color Palette

### Primary Colors
- Primary: #2563EB - Research blue for citations, credibility badges, primary actions
- Primary-hover: #1D4ED8 - Darker research blue for interactive states
- Primary-light: #DBEAFE - Very light blue for backgrounds, highlights

### Neutral Scale
- neutral-50: #FAFAFA - Main page background, largest surfaces
- neutral-100: #F3F4F6 - Secondary backgrounds, card backgrounds
- neutral-200: #E5E7EB - Light borders, dividers
- neutral-300: #D1D5DB - Subtle borders, inactive elements
- neutral-400: #9CA3AF - Placeholder text, disabled states
- neutral-500: #6B7280 - Secondary text, captions
- neutral-600: #374151 - Primary body text
- neutral-700: #111827 - Headings, high emphasis
- neutral-800: #0F172A - Maximum contrast elements
- neutral-900: #000000 - Focus indicators, critical elements

### Semantic Colors
- success: #10B981 - Green checkmarks, verified information
- warning: #F59E0B - Amber for unverified claims
- error: #EF4444 - Red for errors, refuted claims
- info: #2563EB - Blue for information, same as primary

### Special Effects
- glass-blur: backdrop-filter: blur(10px)
```
</details>

- glass-opacity: rgba(255, 255, 255, 0.7)
- shadow-sm: 0 1px 2px 0 rgba(0, 0, 0, 0.05)
- shadow-md: 0 4px 6px -1px rgba(0, 0, 0, 0.1), 0 2px 4px -1px rgba(0, 0, 0, 0.06)
- shadow-lg: 0 10px 15px -3px rgba(0, 0, 0, 0.1), 0 4px 6px -2px rgba(0, 0, 0, 0.05)
- glass-border: 1px solid rgba(255, 255, 255, 0.2)

Typography System

Font Stack
font-family: 'Inter', 'Segoe UI', Roboto, sans-serif;

Type Scale
- text-xs: 0.75rem (12px) / 1rem line-height
- text-sm: 0.875rem (14px) / 1.25rem line-height
- text-base: 1rem (16px) / 1.5rem line-height
- text-lg: 1.125rem (18px) / 1.75rem line-height
- text-xl: 1.25rem (20px) / 1.75rem line-height
- text-2xl: 1.5rem (24px) / 2rem line-height
- text-3xl: 1.875rem (30px) / 2.25rem line-height
- text-4xl: 2.25rem (36px) / 2.5rem line-height
- text-5xl: 3rem (48px) / 1.2 line-height

Font Weights
- Headings: 600 (semibold) - strong visual emphasis
- Body: 400 (regular) - all paragraph text
- UI elements: 500 (medium) - buttons, labels
- Emphasis: 700 (bold) - only for critical information

Letter Spacing
- Headings: -0.01em - tight for impact
- Body: 0em - standard
- UI: 0.02em - slight expansion for clarity

Spacing System

Base unit: 8px

Scale
- space-0: 0
- space-1: 4px (0.5 × base)
- space-2: 8px (1 × base)
- space-3: 12px (1.5 × base)
- space-4: 16px (2 × base)
- space-5: 20px (2.5 × base)
- space-6: 24px (3 × base)
- space-8: 32px (4 × base)
- space-10: 40px (5 × base)
- space-12: 48px (6 × base)
- space-16: 64px (8 × base)

Layout Principles
- Container max-width: 1280px (80rem)
- Section padding: 64px top/bottom (desktop), 32px (tablet), 24px (mobile)
- Grid columns: 12-column grid on desktop, 8 on tablet, 4 on mobile
- Grid gap: 24px (desktop), 16px (tablet), 12px (mobile)
- Content padding: 24px sides (desktop), 16px (tablet), 12px (mobile)

Component Specifications

Buttons

```
/* Primary Button - Research blue, glassmorphic on hover */
display: inline-flex;
align-items: center;
gap: 8px;
padding: 12px 20px;
border: none;
border-radius: 8px;
background-color: #2563EB;
color: white;
font-weight: 500;
text-transform: none;
transition: all 200ms ease-out;
cursor: pointer;

/* Hover state */
background-color: #1D4ED8;
box-shadow: 0 4px 12px rgba(37, 99, 235, 0.3);

/* Focus state */
outline: 2px solid #2563EB;
outline-offset: 2px;

/* Disabled state */
opacity: 0.5;
cursor: not-allowed;

/* Secondary Button - Transparent with border */
background-color: transparent;
border: 1px solid #E5E7EB;
color: #374151;
padding: 12px 20px;

/* Secondary Hover */
background-color: #F3F4F6;
border-color: #D1D5DB;
```

Input Fields

```
height: 44px;
padding: 12px 16px;
border: 1px solid #E5E7EB;
border-radius: 8px;
background-color: white;
color: #374151;
font-size: 1rem;
transition: all 200ms ease-out;
font-family: inherit;

/* Focus state */
outline: none;
border-color: #2563EB;
box-shadow: 0 0 0 3px rgba(37, 99, 235, 0.1);
```

```css
/* Error state */
border-color: #EF4444;
box-shadow: 0 0 0 3px rgba(239, 68, 68, 0.1);
```

Search Result Cards (Glassmorphic)

```css
padding: 20px;
border-radius: 12px;
background: rgba(255, 255, 255, 0.7);
backdrop-filter: blur(10px);
border: 1px solid rgba(255, 255, 255, 0.2);
box-shadow: 0 4px 6px -1px rgba(0, 0, 0, 0.05);
transition: all 300ms ease-out;
margin-bottom: 16px;

/* Hover state */
background: rgba(255, 255, 255, 0.85);
box-shadow: 0 10px 25px -5px rgba(0, 0, 0, 0.1);
transform: translateY(-2px);

/* Focus state */
outline: 2px solid #2563EB;
outline-offset: 0;
```

Credibility Badge

```css
display: inline-flex;
align-items: center;
gap: 6px;
padding: 6px 12px;
border-radius: 20px;
font-size: 0.875rem;
font-weight: 500;

/* High credibility (&gt;80%) */
background-color: #DBEAFE;
color: #1D4ED8;

/* Medium credibility (60-80%) */
background-color: #FEF3C7;
color: #92400E;

/* Low credibility (&lt;60%) */
background-color: #FEE2E2;
color: #991B1B;
```

Citation Numbers

```css
display: inline;
color: #2563EB;
font-weight: 600;
cursor: pointer;
transition: all 150ms ease-out;

/* Hover - show as blue badge */
background-color: #DBEAFE;
padding: 2px 6px;
border-radius: 4px;
```

Controversy Indicator
```
display: flex;
align-items: center;
gap: 12px;
padding: 16px;
border-radius: 8px;
background-color: #FEF3C7;
border-left: 4px solid #F59E0B;
margin-bottom: 20px;

/* Text in warning indicator */
color: #92400E;
font-size: 0.95rem;
line-height: 1.5;
```

Animation Guidelines

Timing Functions
- ease-out: cubic-bezier(0.0, 0.0, 0.2, 1) - for entering animations
- ease-in-out: cubic-bezier(0.4, 0.0, 0.2, 1) - for transitions
- spring: cubic-bezier(0.175, 0.885, 0.32, 1.275) - for interactive elements

Durations
- instant: 0ms
- fast: 150ms - hover states
- normal: 300ms - standard transitions
- slow: 500ms - complex animations

Standard Transitions
- Hover: background-color, box-shadow, transform 200ms ease-out
- Focus: outline, box-shadow 200ms ease-out
- Active: transform 100ms ease-out

Implementation Rules

DO:
- Always use glass panels for research results to show layering
- Maintain strict 8px grid alignment - no visual accidents
- Use single accent color (#2563EB) consistently across all interactive elements
- Respect generous spacing (space-6 minimum between major sections)
- Layer elements using backdrop-filter blur, not opacity alone

DON'T:
- Never use more than 2 accent colors - dilutes focus
- Never violate grid alignment for "design flair" - grid IS the design
- Never use shadows without purpose - reserve for elevation/depth
- Never overcrowd information - white space is content here
- Never animate unnecessarily - every motion must communicate meaning

Accessibility Requirements
- Minimum contrast: WCAG AA (4.5:1 for text, 3:1 for graphics)
- Focus indicators: 2px solid blue outline with 2px offset
- Touch targets: 44px × 44px minimum
- Motion preferences: Respect prefers-reduced-motion (no animation)

Visual Hierarchy System

Emphasis Levels
- **Level 1 (Maximum):** Large size (text-4xl+), bold weight (700), primary color
- **Level 2 (High):** text-2xl, semibold weight (600), primary or neutral-700
- **Level 3 (Standard):** text-base, medium weight (500), neutral-600
- **Level 4 (Reduced):** text-sm, regular weight (400), neutral-500
- **Level 5 (Minimum):** text-xs, regular weight (400), neutral-400

Information Architecture
- H1: Search query / page title (text-5xl, 700)
- H2: Major sections - "Answer", "Sources", "Analysis" (text-3xl, 600)
- H3: Subsections - "Controversy Analysis", "Credibility Scores" (text-xl, 600)
- Body text: Research content and results (text-base, 400)
- Caption: Source attribution, timestamps (text-sm, 400, neutral-500)

Component States

Button States
- **Default:** #2563EB background, white text
- **Hover:** Darker blue (#1D4ED8), enhanced shadow
- **Active/Pressed:** scale(0.98), stronger shadow
- **Focus:** 2px blue outline, 2px offset
- **Disabled:** 50% opacity, cursor not-allowed

Input States
- **Default:** white background, light border
- **Focus:** light blue outline, soft shadow
- **Error:** red border, red outline on focus
- **Disabled:** neutral-100 background, neutral-300 border, 50% opacity

Result Card States
- **Default:** Glass panel at 70% opacity with blur
- **Hover:** Increased opacity (85%), lifted shadow, -2px translateY
- **Focus:** 2px blue outline
- **Loading:** Skeleton shimmer effect

Responsive Behavior

Breakpoints
- Mobile: 0-640px (base styles)
- Tablet: 640px-1024px (medium adjustments)
- Desktop: 1024px+ (full experience)
- Large: 1280px+ (optimized for large screens)

Component Adaptation
- Navigation: Full nav on desktop, hamburger menu on mobile
- Grid columns: 4 (mobile) → 8 (tablet) → 12 (desktop)
- Typography: Scale down 20% on mobile
- Spacing: Reduce by 25% on mobile (space-6 → space-4)
- Glass blur: Reduce to 8px on mobile for performance

Mobile-Specific
- Buttons: Full width on mobile (except inline buttons)
- Cards: Stack vertically, full width with space-3 gap
- Search bar: Fixed position at top on mobile

- Tabs: Horizontal scrollable tabs on mobile

Imagery & Media

Photography Style
- Tone: Professional, neutral
- Color treatment: Natural colors, desaturated backgrounds
- Composition: Centered, rule-of-thirds for hero images
- Subject matter: Concepts visualized simply (not product screenshots)
- Overlay treatment: Optional light gradient overlay to separate text

Image Containers
- Aspect ratios: 16:9 for hero, 1:1 for avatars, 4:3 for content
- Border radius: 12px corners with subtle borders
- Object fit: cover with centered position
- Shadows: Apply shadow-md to images

Illustration Style
- Complexity: Simple, icon-like illustrations
- Line weight: 2px consistent strokes
- Color usage: Monochrome with single blue accent, or full palette
- Perspective: Flat, occasionally isometric
- Purpose: Illustrate concepts, not decorate

Micro-interactions

Feedback Patterns
- **Button click:** scale(0.98) for 100ms, then back
- **Input focus:** border-color shift + soft box-shadow 200ms
- **Citation hover:** Show tooltip with source title
- **Result card hover:** Lift effect 200ms ease-out

Loading Patterns
- Skeleton screens: neutral-200 shimmer animation
- Spinners: 24px blue spinner, 2s rotation
- Progress bars: 4px height, 300ms fill animation
- Placeholder text: "Loading sources...", "Analyzing query..." etc.

Notification Patterns
- Toast position: bottom-right corner on desktop, bottom-center mobile
- Animation: Slide up + fade in 300ms, fade out 300ms on dismiss
- Duration: 5 seconds auto-dismiss (except errors)
- Stacking: Max 3 visible, queue behind

Content & Messaging

Voice & Tone
- Personality traits: Professional, authoritative, helpful
- Technical level: Accessible to all, explain terms as needed
- Emotion: Confident (we found good sources), encouraging (keep researching)

Microcopy Guidelines

/* Success messages */
"✓ [Number] sources found for '[topic]'" - clear, quantified
"✓ Research completed in [time]s" - emphasizes speed

```
/* Error messages */
"⚠ No sources found. Try a broader search." - actionable, friendly
"⚠ Fact verification failed. Please try again." - transparent about issue

/* Empty states */
"␣ Enter a research query above to get started" - inviting
"␣ No sources added yet" - conversational

/* Loading messages */
"␣ Decomposing your query..." - specific about what's happening
"␣ Retrieving sources from arXiv, Semantic Scholar..."
```

Writing Principles
- Sentence case for most UI (lowercase unless proper noun)
- Oxford comma: yes, use for clarity
- Contractions: yes, for friendly tone ("you're", "it's")
- Technical jargon: explain on first use
- Action labels: Verb-first and specific ("Search", "Verify", not "Go")

Data Visualization

Chart Styling
- Color sequence: [#2563EB, #10B981, #F59E0B, #EF4444, #8B5CF6]
- Grid color: #E5E7EB (light gray)
- Axis color: #6B7280 (medium gray)
- Tick size: 4px lines

Chart Principles
- Grid lines: Subtle, light gray horizontal lines
- Labels: Outside bars/lines, not inside
- Legends: Bottom center, horizontal layout
- Animations: Staggered bars on load 500ms each
- Interactions: Tooltip on hover showing values

Dark Mode Adaptation

Color Transformations
- neutral-50 (white) → #0F172A (dark navy)
- neutral-100 (light gray) → #1E293B (dark surface)
- neutral-600 (dark gray) → #CBD5E1 (light text)
- #2563EB (research blue) → #60A5FA (lighter blue for contrast)

Special Considerations
- Image brightness: Reduce 20% via filter: brightness(0.8)
- Glass effect: Reduce blur to 8px, increase opacity to 0.85
- Shadow adaptation: Use lighter shadows with subtle offset
- Contrast requirements: Same 4.5:1 ratio maintained
- Glass borders: Shift to white outline at 30% opacity

Accessibility Specifications

Keyboard Navigation
- Tab order: Logical flow left-to-right, top-to-bottom
- Focus trap: None (standard pages), except modals
- Skip links: "Skip to main content" visible on tab

- Keyboard shortcuts: None required for MVP

  ### Screen Reader Optimization
  - Landmark usage: <header>, <nav>, <main>, <footer> semantic HTML
  - ARIA labels: aria-label for icon buttons, aria-describedby for errors
  - Live regions: aria-live="polite" for search results loading
  - Heading hierarchy: Strict H1 → H2 → H3 structure

  ### Motion Preferences
  @media (prefers-reduced-motion: reduce) {
    * { animation-duration: 0.01ms !important; }
    * { animation-iteration-count: 1 !important; }
    * { transition-duration: 0.01ms !important; }
  }

  ## Performance Guidelines

  ### Asset Optimization
  - Image formats: WebP with PNG fallback
  - Icon delivery: Inline SVG for control, sprite sheet for bulk
  - Font loading: WOFF2, font-display: swap
  - Critical CSS: Color palette + layout above the fold

  ### Interaction Performance
  - Response time: <200ms for all interactions
  - Animation FPS: 60fps minimum (use transform/opacity only)
  - Scroll performance: Passive event listeners
  - Input latency: <100ms from keystroke to feedback

  ## Implementation Checklist

  - [ ] All colors verified against palette
  - [ ] Spacing follows 8px grid base
  - [ ] All components tested in focus/hover/active states
  - [ ] Responsive tested at 375px, 768px, 1024px, 1440px
  - [ ] Accessibility: Tab navigation functional, contrast verified
  - [ ] Dark mode colors applied and tested
  - [ ] Animations respect prefers-reduced-motion
  - [ ] Performance budget met (all images optimized)

  ## Quick Reference

  Remember: **Every element aligns to the grid. Every interaction has purpose. Transparency

  When implementing:
  1. Start with white space and spacing - let grid define layout
  2. Apply research blue only to interactive elements
  3. Use glass panels to show information depth
  4. Focus on clarity over decoration
  5. Verify accessibility compliance

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DESIGNER 2: MARCUS VONN - "Perception Impact"

Design Style: Brutalist Academic with Bold Typography

Visual Preview:

- **Primary aesthetic:** Unapologetic grid-based design with strong geometric shapes and heavy typography. Inspired by brutalist architecture and academic publications. Every element has weight and purpose.

- **Colors:** High-contrast black, white, and research burgundy

- **Typography:** Serif headlines (Georgia) with sharp sans-serif (Roboto) body

- **Best for:** Academic institutions, law firms, policy makers - users who value authority and seriousness

Signature moves:

- **Heavy borders and separators** - 3px black lines defining sections with purpose

- **Bold typography hierarchy** - Massive, confident headlines in serif font

- **High contrast** - Pure black on white, no gray areas

- **Print-like layout** - Academic journal aesthetic, densely packed with meaning

- **Visible structure** - Grid lines and separation lines show the underlying system

Example mental image:
"A research results page that looks like an academic journal printed on high-quality paper. Bold black headlines announce major sections like 'SOURCES' and 'ANALYSIS'. Heavy rules separate information. White space used strategically, not wastefully. Source cards have thick borders. Everything feels authoritative, permanent, important. You're reading a research document, not a web page."

<details>
<summary>**> View complete design system (Marcus Vonn)**</summary>

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```
# Design System Specification: Perception Impact (Brutalist Academic)

You are implementing a Brutalist Academic design system characterized by heavy typography,
stark high-contrast colors, visible structure, and authoritative presence. This style
prioritizes reading and comprehension over decoration.

## Core Visual Language

This design system emphasizes:
1. **Typographic expression** - Heavy fonts carry meaning visually
2. **Structural honesty** - Show the grid, show the system, no hidden complexity
3. **High contrast** - Pure black and white with strategic color
4. **Academic authority** - Professional, serious, trustworthy through gravitas
```

Every element should reinforce authority and clarity through bold choices and visible st

Color Palette

Primary Colors
- Primary: #6B1E1E - Deep research burgundy for citations, primary actions
- Primary-hover: #4A1414 - Darker burgundy for interactive states
- Primary-light: #F5E6E6 - Very light burgundy for backgrounds

Neutral Scale (High Contrast)
- neutral-50: #FFFFFF - Backgrounds, card bases
- neutral-100: #F8F8F8 - Secondary backgrounds
- neutral-200: #EEEEEE - Light borders, subtle dividers
- neutral-300: #DDDDDD - Clear borders
- neutral-400: #AAAAAA - Placeholder text
- neutral-500: #777777 - Secondary text, captions
- neutral-600: #333333 - Primary body text
- neutral-700: #1A1A1A - Headings
- neutral-800: #0A0A0A - Emphasis
- neutral-900: #000000 - Maximum contrast, structural lines

Semantic Colors
- success: #2A5A2A - Dark green for verification
- warning: #A65500 - Burnt orange for caution
- error: #8B0000 - Dark red for critical
- info: #6B1E1E - Same as primary for consistency

Special Effects
- border-heavy: 3px solid #000000 - Defining borders
- border-medium: 2px solid #000000 - Secondary borders
- border-light: 1px solid #000000 - Subtle structure
- shadow-sm: 0 1px 0 rgba(0, 0, 0, 0.1)
- shadow-md: 0 2px 8px rgba(0, 0, 0, 0.15)
- shadow-lg: 0 4px 12px rgba(0, 0, 0, 0.2)
- rule-accent: 4px solid #6B1E1E - Burgundy accent rules

Typography System

Font Stack
Headings: 'Georgia', 'Times New Roman', serif;
Body: 'Roboto', 'Segoe UI', sans-serif;

Type Scale (Large and Bold)
- text-xs: 0.75rem (12px) / 1rem, regular
- text-sm: 0.875rem (14px) / 1.25rem, regular
- text-base: 1rem (16px) / 1.5rem, regular
- text-lg: 1.125rem (18px) / 1.75rem, semibold
- text-xl: 1.25rem (20px) / 1.75rem, semibold
- text-2xl: 1.5rem (24px) / 2rem, bold
- text-3xl: 1.875rem (30px) / 2.25rem, bold
- text-4xl: 2.25rem (36px) / 2.5rem, bold
- text-5xl: 3rem (48px) / 1.2, bold (SERIF)

Font Weights
- Headings (serif): 700 (bold) - commanding presence

- Body: 400 (regular) - clean reading
- UI elements: 600 (semibold) - clear action
- Emphasis: 700 (bold) - never decoration

Letter Spacing
- Headings: -0.02em - tight, powerful
- Body: 0em - standard, readable
- UI: 0.03em - expanded for clarity
- ALL CAPS text: 0.05em - mandatory expansion

Spacing System

Base unit: 8px (but feels tighter due to heavy typography)

Scale
- space-0: 0
- space-1: 4px
- space-2: 8px
- space-3: 12px
- space-4: 16px
- space-5: 20px
- space-6: 24px
- space-8: 32px
- space-10: 40px
- space-12: 48px
- space-16: 64px

Layout Principles
- Container max-width: 1024px (academic paper width)
- Column structure: 2-column layout (main + sidebar) on desktop
- Section padding: 48px top/bottom, with heavy rule separators
- Grid columns: 12-column, but visibly separated
- Grid gap: 24px with visible lines

Component Specifications

Buttons (Bold and Clear)

```
/* Primary Button - Burgundy background, black outline */
display: inline-flex;
align-items: center;
gap: 8px;
padding: 16px 24px;
border: 2px solid #000000;
background-color: #6B1E1E;
color: white;
font-weight: 700;
font-size: 1rem;
text-transform: uppercase;
letter-spacing: 0.05em;
transition: all 150ms ease-out;
cursor: pointer;

/* Hover state - inverted colors */
background-color: #000000;
color: white;
```

```css
border-color: #6B1E1E;

/* Active state */
transform: scale(0.98);

/* Focus state - double outline */
outline: 3px solid #6B1E1E;
outline-offset: 2px;

/* Secondary Button - White with black border */
background-color: white;
border: 2px solid #000000;
color: #000000;
text-transform: uppercase;

/* Secondary Hover */
background-color: #000000;
color: white;
```

Input Fields (Structured)
```css
height: 48px;
padding: 12px 16px;
border: 2px solid #000000;
border-radius: 0; /* No rounding - brutalist */
background-color: white;
color: #333333;
font-family: 'Roboto', sans-serif;
font-size: 1rem;
transition: all 150ms ease-out;

/* Focus state - thicker border */
outline: none;
border-width: 3px;
box-shadow: none;
```

Search Result Cards (Academic)
```css
padding: 24px;
border: 3px solid #000000;
border-radius: 0;
background-color: white;
margin-bottom: 24px;
box-shadow: 0 4px 0 rgba(0, 0, 0, 0.1); /* Slight lift */

/* Hover state - enhanced shadow */
box-shadow: 0 8px 0 rgba(0, 0, 0, 0.15);
transform: translateY(-2px);

/* Focus state */
outline: 2px dashed #6B1E1E;
outline-offset: 2px;
```

Result Title (In cards)
```css
font-family: 'Georgia', serif;
font-size: 1.5rem;
font-weight: 700;
color: #000000;
```

```
margin-bottom: 8px;
line-height: 1.3;

### Credibility Badge (Prominently Displayed)
display: inline-flex;
align-items: center;
gap: 8px;
padding: 8px 16px;
border: 2px solid;
border-radius: 0;
font-weight: 700;
text-transform: uppercase;
font-size: 0.75rem;
letter-spacing: 0.05em;

/* High credibility */
border-color: #2A5A2A;
background-color: white;
color: #2A5A2A;

/* Medium credibility */
border-color: #A65500;
background-color: white;
color: #A65500;

/* Low credibility */
border-color: #8B0000;
background-color: white;
color: #8B0000;

### Section Headers (Major)
display: block;
font-family: 'Georgia', serif;
font-size: 2.25rem;
font-weight: 700;
color: #000000;
margin-bottom: 12px;
margin-top: 48px;
padding-bottom: 16px;
border-bottom: 4px solid #6B1E1E;

### Horizontal Rules (Structural)
border: none;
border-top: 3px solid #000000;
height: 0;
margin: 48px 0;

### Citation Style (Visible)
[number] - styled as superscript, burgundy color
Appears in gray box on hover showing source

## Animation Guidelines

### Timing Functions
- ease-out: cubic-bezier(0.0, 0.0, 0.2, 1)
- ease-in-out: cubic-bezier(0.4, 0.0, 0.2, 1)
```

- spring: cubic-bezier(0.175, 0.885, 0.32, 1.275) - but used sparingly

Durations
- instant: 0ms
- fast: 150ms
- normal: 300ms
- slow: 500ms

Standard Transitions
- Hover: background-color, border-width, box-shadow 150ms ease-out
- Focus: outline, box-shadow 150ms ease-out
- Active: transform 100ms ease-out

Implementation Rules

DO:
- Always use 2-3px borders for definition and structure
- Use heavy, bold typography for visual interest (not decoration)
- Maintain pure black (#000000) structural lines - no grays
- Display the grid visually - let users see system logic
- Use uppercase for section headers and primary buttons
- Layer elements with shadow effects for depth

DON'T:
- Never use rounded corners - angular and structured
- Never use light gray for elements - white or black or off-white
- Never apologize for bold choices - this is deliberate design
- Never hide structure - show the grid and system
- Never use more than 2 typefaces
- Never overcomplicate - simplicity through reduction

Accessibility Requirements
- Minimum contrast: WCAG AAA (7:1 for text) - easily met with black/white
- Focus indicators: 2px dashed burgundy outline with offset
- Touch targets: 48px × 48px minimum (generous for academic users)
- Motion preferences: Respect prefers-reduced-motion

Visual Hierarchy System

Emphasis Levels
- **Level 1 (Maximum):** Georgia serif, text-5xl, 700 weight, black color, section header
- **Level 2 (High):** Georgia serif, text-3xl, 700 weight, black
- **Level 3 (Standard):** Roboto, text-lg, 600 weight, #333333
- **Level 4 (Reduced):** Roboto, text-base, 400 weight, #666666
- **Level 5 (Minimum):** Roboto, text-sm, 400 weight, #999999

Component States

Button States
- Default: Burgundy #6B1E1E with black border
- Hover: Inverted to black with burgundy border
- Active: Scaled down 2%
- Focus: 3px dashed outline in burgundy
- Disabled: White background, gray border, 50% opacity

Input States

- Default: White, 2px black border
- Focus: 3px black border (thicker)
- Error: Red border (3px)
- Filled: Light beige background

Responsive Behavior

Breakpoints
- Mobile: 0-640px
- Tablet: 640px-1024px
- Desktop: 1024px+
- Large: 1280px+

Mobile Adaptations
- Column layout: Single column (no sidebar)
- Padding: 24px (halved from desktop)
- Borders: Maintained at 2-3px for impact
- Typography: Base size maintained for readability
- Button width: Full width on mobile

Dark Mode Adaptation

Color Transformations
- White → #0A0A0A (pure black)
- Black → #FFFFFF (pure white) - INVERTED
- #6B1E1E → #E85D5D (lighter burgundy)
- #333333 → #DDDDDD (light gray)

Inversion Notes
Dark mode inverts the entire aesthetic - light text on dark, maintaining contrast

Accessibility Specifications

Keyboard Navigation
- Tab order: Logical left-to-right, top-to-bottom
- Focus trap: None for standard pages
- Skip links: "Skip to main content"

Screen Reader Optimization
- Landmarks: Semantic HTML structure
- Headings: Strict hierarchy (H1, H2, H3 only)
- ARIA: Minimal needed, semantic HTML sufficient

Motion Preferences
```
@media (prefers-reduced-motion: reduce) {
  * { animation: none !important; }
  * { transition-duration: 0.01ms !important; }
}
```

Performance Guidelines

- Images: JPG for photography, PNG for charts
- Icons: SVG inline
- Fonts: System fonts or serif/sans-serif pair only
- Interactions: Immediate response (<100ms)

```
## Implementation Checklist

- [ ] All black lines are #000000 (pure black)
- [ ] All typography uses correct serif/sans-serif pairing
- [ ] Borders at 2-3px (no 1px subtle borders)
- [ ] Section headers have burgundy bottom border
- [ ] Buttons are uppercase with letter-spacing
- [ ] Focus states visible with dashed outlines
- [ ] No rounded corners anywhere
- [ ] Tested at breakpoints: 375px, 768px, 1024px

## Quick Reference

Remember: **Typography IS decoration. Structure IS content. Everything visible. Nothing h

When implementing:
1. Make bold decisions with type
2. Show the underlying grid
3. Use black/white/burgundy strategically
4. Make every element have weight and purpose
5. Never soften edges - keep it angular and direct
```

</details>

DESIGNER 3: NOVA RIDGE - "Intelligence Forward"

Design Style: Glassmorphic Futurism with Data Visualization

Visual Preview:

- **Primary aesthetic:** Cutting-edge modern design using transparency, gradients, and layered glass effects. Emphasizes data and relationships through visual metaphors. Feels like peering into an AI's perspective.
- **Colors:** Neon-touched gradients (cyan, purple, pink)
- **Typography:** Modern variable fonts with optical sizing
- **Best for:** Tech companies, startups, data scientists - users who embrace innovation

Signature moves:

- **Floating glass panels** - Semi-transparent cards with vibrant colored borders
- **Animated gradients** - Subtle moving color gradients showing energy
- **Data-forward design** - Charts and visualizations integrated into UI
- **Layered depth** - Multiple blur/transparency levels create 3D space
- **Neon accents** - Cyan/purple glow effects on interactive elements

Example mental image:
"A futuristic research interface where results float in semi-transparent glass containers. Each source card has a subtle colored border (cyan for high credibility, purple for controversy). Behind everything is

a faint animated grid. Results glow slightly when you hover. Charts are embedded within cards, not separate. The entire interface feels like you're looking through multiple layers of illuminated glass. Modern, sleek, tech-forward. This is what research looks like in 2025."

<details>
<summary>> View complete design system (Nova Ridge)</summary>

?? COPY BELOW FOR YOUR AI CODING TOOL ??

```
# Design System Specification: Intelligence Forward (Glassmorphic Futurism)

You are implementing a Glassmorphic Futuristic design system characterized by
transparency, layered depth, vibrant gradients, and data visualization focus.
This style emphasizes modernity through technical sophistication.

## Core Visual Language

This design system emphasizes:
1. **Depth through transparency** - Glass layers create visual hierarchy
2. **Gradient as storytelling** - Colors indicate data meaning
3. **Data integration** - Visualizations seamlessly embedded in UI
4. **Subtle animation** - Motion shows system intelligence

Every element should reinforce the sense of peering into an intelligent system through la

## Color Palette

### Primary Colors (Gradient-based)
- Primary: #00D9FF - Cyan accent for primary interactive, high credibility
- Primary-hover: #00B8D4 - Darker cyan
- Primary-light: #00D9FF22 - Cyan transparent for backgrounds

### Accent Colors (Semantic through color)
- Credibility-high: #00D9FF - Cyan for strong credibility (badges glow cyan)
- Credibility-medium: #8B5CF6 - Purple for moderate credibility
- Credibility-low: #EC4899 - Pink for low credibility
- Controversy: #F59E0B - Amber with glow effect

### Neutral Scale (Dark Mode Primary)
- neutral-50: #F8FAFC - Light backgrounds, minimal use
- neutral-100: #F1F5F9 - Card backgrounds (with opacity)
- neutral-200: #E2E8F0 - Borders, dividers
- neutral-300: #CBD5E1 - Secondary borders
- neutral-400: #94A3B8 - Secondary text
- neutral-500: #64748B - Muted text
- neutral-600: #475569 - Primary text
- neutral-700: #1E293B - High contrast
- neutral-800: #0F172A - Very dark backgrounds
- neutral-900: #020617 - Darkest backgrounds

### Special Effects
- glass-light: rgba(255, 255, 255, 0.1) with blur(10px)
- glass-medium: rgba(255, 255, 255, 0.15) with blur(20px)
- glass-intense: rgba(255, 255, 255, 0.2) with blur(30px)
- glow-cyan: 0 0 20px rgba(0, 217, 255, 0.3)
```
</details>

```
- glow-purple: 0 0 20px rgba(139, 92, 246, 0.3)
- glow-pink: 0 0 20px rgba(236, 72, 153, 0.3)
- gradient-aurora: linear-gradient(135deg, #00D9FF 0%, #8B5CF6 50%, #EC4899 100%)
- gradient-flow: linear-gradient(90deg, #00D9FF, #8B5CF6, #00D9FF)
- shadow-glow-sm: 0 8px 32px rgba(0, 217, 255, 0.1)
- shadow-glow-md: 0 8px 32px rgba(139, 92, 246, 0.15)
- shadow-glow-lg: 0 8px 32px rgba(0, 0, 0, 0.3)
- backdrop-blur-sm: backdrop-filter: blur(10px)
- backdrop-blur-md: backdrop-filter: blur(20px)
- backdrop-blur-lg: backdrop-filter: blur(30px)
```

Typography System

Font Stack (Variable fonts for intelligent scaling)
```
font-family: 'Inter', 'SF Pro Display', system-ui, sans-serif;
/* Inter supports optical sizing for perfect readability at any size */
```

Type Scale (with fluid scaling)
- text-xs: clamp(0.75rem, 1vw, 0.875rem) / 1rem
- text-sm: clamp(0.875rem, 1.2vw, 1rem) / 1.25rem
- text-base: clamp(1rem, 1.5vw, 1.125rem) / 1.5rem
- text-lg: clamp(1.125rem, 1.8vw, 1.25rem) / 1.75rem
- text-xl: clamp(1.25rem, 2vw, 1.5rem) / 1.75rem
- text-2xl: clamp(1.5rem, 2.5vw, 1.875rem) / 2rem
- text-3xl: clamp(1.875rem, 3vw, 2.25rem) / 2.25rem
- text-4xl: clamp(2.25rem, 4vw, 3rem) / 2.5rem

Font Weights
- Headings: 600 (semibold) - modern, less heavy than 700
- Body: 400 (regular) - clean, optimal reading
- UI elements: 500 (medium) - clear action
- Accent: 700 (bold) - for emphasis

Letter Spacing
- Headings: -0.01em - modern tightness
- Body: 0em - standard
- UI: 0.02em - clarity
- Headlines: -0.02em - tight, confident

Spacing System

Base unit: 8px (maintains consistency with modern web standards)

Scale
- space-0: 0
- space-1: 4px (0.5 × 8)
- space-2: 8px
- space-3: 12px
- space-4: 16px
- space-5: 20px
- space-6: 24px
- space-8: 32px
- space-10: 40px
- space-12: 48px
- space-16: 64px
- space-20: 80px
```

### Layout Principles
- Container max-width: 1400px (modern wide layouts)
- Section padding: 80px top/bottom (generous breathing), 40px (tablet), 24px (mobile)
- Grid columns: 12-column layout with gaps
- Grid gap: 20px (desktop), 16px (tablet), 12px (mobile)
- Card spacing: 20px between cards

## Component Specifications

### Buttons (Glassmorphic)

```
/* Primary Button - Cyan glow */
display: inline-flex;
align-items: center;
gap: 8px;
padding: 12px 28px;
border: 1px solid rgba(0, 217, 255, 0.5);
border-radius: 12px;
background: rgba(0, 217, 255, 0.1);
backdrop-filter: blur(10px);
color: #00D9FF;
font-weight: 600;
text-transform: uppercase;
letter-spacing: 0.05em;
font-size: 0.875rem;
transition: all 200ms cubic-bezier(0.175, 0.885, 0.32, 1.275);
cursor: pointer;
box-shadow: 0 0 20px rgba(0, 217, 255, 0.2);

/* Hover state */
background: rgba(0, 217, 255, 0.2);
border-color: #00D9FF;
box-shadow: 0 0 30px rgba(0, 217, 255, 0.4);
transform: translateY(-2px);

/* Active state */
transform: scale(0.98);
box-shadow: 0 0 20px rgba(0, 217, 255, 0.3);

/* Focus state */
outline: 2px solid #00D9FF;
outline-offset: 2px;

/* Secondary Button - Purple variant */
border-color: rgba(139, 92, 246, 0.5);
background: rgba(139, 92, 246, 0.1);
color: #8B5CF6;
box-shadow: 0 0 20px rgba(139, 92, 246, 0.2);
```

Input Fields (Glassmorphic)
```
height: 48px;
padding: 12px 16px;
border: 1px solid rgba(0, 217, 255, 0.3);
border-radius: 12px;
background: rgba(255, 255, 255, 0.05);
```

```css
  backdrop-filter: blur(10px);
  color: #F1F5F9;
  font-family: 'Courier New', monospace;
  font-size: 0.95rem;
  transition: all 200ms ease-out;
  caret-color: #00D9FF;

  /* Placeholder */
  ::placeholder {
    color: rgba(241, 245, 249, 0.5);
  }

  /* Focus state - enhanced glow */
  outline: none;
  border-color: #00D9FF;
  background: rgba(0, 217, 255, 0.05);
  box-shadow: 0 0 20px rgba(0, 217, 255, 0.2);

  /*### Search Result Cards (Glassmorphic Layered) */
  padding: 24px;
  border: 1px solid rgba(0, 217, 255, 0.2);
  border-radius: 16px;
  background: rgba(15, 23, 42, 0.4);
  backdrop-filter: blur(20px);
  box-shadow: 0 8px 32px rgba(0, 0, 0, 0.1);
  transition: all 300ms cubic-bezier(0.175, 0.885, 0.32, 1.275);
  margin-bottom: 16px;
  position: relative;

  /* Colored border based on credibility - added via data attribute */
  border-left: 4px solid var(--credibility-color, #00D9FF);

  /* Hover state - enhanced glass effect */
  background: rgba(15, 23, 42, 0.6);
  backdrop-filter: blur(30px);
  border-color: #00D9FF;
  box-shadow: 0 20px 50px rgba(0, 217, 255, 0.2);
  transform: translateY(-4px);

  /* Focus state */
  outline: 2px solid #00D9FF;
  outline-offset: 2px;

  /*### Credibility Badge (Data-Colored) */

  /* High credibility (&gt;80%) - Cyan */
  display: inline-flex;
  align-items: center;
  gap: 6px;
  padding: 8px 12px;
  border: 1px solid rgba(0, 217, 255, 0.6);
  border-radius: 8px;
  background: rgba(0, 217, 255, 0.1);
  color: #00D9FF;
  font-weight: 500;
  font-size: 0.85rem;
```

```css
box-shadow: 0 0 12px rgba(0, 217, 255, 0.2);

/* Medium credibility (60-80%) - Purple */
border-color: rgba(139, 92, 246, 0.6);
background: rgba(139, 92, 246, 0.1);
color: #C4B5FD;
box-shadow: 0 0 12px rgba(139, 92, 246, 0.2);

/* Low credibility (&lt;60%) - Pink */
border-color: rgba(236, 72, 153, 0.6);
background: rgba(236, 72, 153, 0.1);
color: #F472B6;
box-shadow: 0 0 12px rgba(236, 72, 153, 0.2);
```

Controversy Indicator (Animated)
```css
display: flex;
align-items: center;
gap: 12px;
padding: 16px;
border: 1px solid rgba(245, 158, 11, 0.4);
border-radius: 12px;
background: rgba(245, 158, 11, 0.05);
backdrop-filter: blur(10px);
border-left: 4px solid #F59E0B;
margin-bottom: 20px;
animation: pulse 2s cubic-bezier(0.4, 0, 0.6, 1) infinite;

@keyframes pulse {
  0%, 100% { opacity: 1; }
  50% { opacity: 0.8; }
}
```

Chart Components (Integrated)
```css
display: grid;
grid-template-columns: 1fr 1fr;
gap: 16px;
padding: 20px;
border-radius: 12px;
background: rgba(139, 92, 246, 0.05);
backdrop-filter: blur(10px);
border: 1px solid rgba(139, 92, 246, 0.2);

/* Chart background */
.chart-container {
  background: rgba(0, 0, 0, 0.2);
  border-radius: 8px;
  padding: 16px;
}
```

Animation Guidelines

Timing Functions
- ease-out: cubic-bezier(0.0, 0.0, 0.2, 1) - for entrance
- ease-in-out: cubic-bezier(0.4, 0.0, 0.2, 1) - for interactions
- spring: cubic-bezier(0.175, 0.885, 0.32, 1.275) - for playful, responsive interactions

Durations
- instant: 0ms
- fast: 150ms - rapid feedback
- normal: 300ms - standard transitions
- slow: 500ms - complex animations
- extended: 1000ms - background animations

Standard Transitions
- Hover: border-color, background, box-shadow, transform 200ms spring
- Focus: outline, box-shadow 200ms ease-out
- Active: transform 100ms ease-out

Continuous Animations
- Gradient flow: Animated gradients in background (10s loop)
- Pulse effect: Subtle opacity pulse for alerts (2s loop)
- Glow: Soft glow animations on interactive elements

Implementation Rules

DO:
- Always use glass panels with backdrop-filter blur
- Combine transparency levels (0.1, 0.15, 0.2) for depth
- Use color to indicate data meaning (cyan=credible, purple=moderate, pink=concern)
- Animate on interaction, not just decoration
- Layer elements with intentional depth
- Use gradients as visual accents, not backgrounds
- Embed data visualizations into cards

DON'T:
- Never use solid backgrounds - always include transparency
- Never ignore motion - movement communicates state
- Never apply blur without a purpose (depth, hierarchy)
- Never use corner radius below 12px (modern curves)
- Never overuse neon colors - use strategically
- Never make elements feel flat - always add depth

Accessibility Requirements
- Minimum contrast: WCAG AA (4.5:1 for text, 3:1 for graphics)
- Focus indicators: 2px solid outline with 2px offset
- Touch targets: 44px × 44px minimum
- Motion preferences: Respect prefers-reduced-motion

Visual Hierarchy System

Emphasis Levels
- **Level 1 (Maximum):** text-4xl, 600 weight, with gradient or glow effect
- **Level 2 (High):** text-2xl, 600 weight, single accent color
- **Level 3 (Standard):** text-base, 400 weight, neutral text
- **Level 4 (Reduced):** text-sm, 400 weight, secondary neutral
- **Level 5 (Minimum):** text-xs, 400 weight, muted neutral

Data-Driven Hierarchy
- Credibility-high: Cyan glow and border
- Credibility-medium: Purple accent
- Credibility-low: Pink warning
- Unverified: Neutral gray

Component States

Button States
- Default: Glass cyan with 20px glow
- Hover: Enhanced glass, brighter glow, slightly lifted
- Active: Pressed in, smaller glow
- Focus: Cyan outline with offset
- Disabled: Reduced opacity (50%), no glow

Input States
- Default: Glass panel with subtle border
- Focus: Cyan border, active glow effect
- Error: Pink/red border with warning glow
- Success: Cyan border with checkmark glow
- Filled: Light background, maintained glass effect

Card States
- Default: Glass with blur(20px)
- Hover: Blur increases to 30px, lifted
- Focus: Cyan outline
- Loading: Skeleton shimmer effect

Responsive Behavior

Breakpoints
- Mobile: 0-640px (base styles, single column)
- Tablet: 640px-1024px (2-column, adjusted spacing)
- Desktop: 1024px-1400px (full layout)
- Ultra-wide: 1400px+ (optimized for large screens)

Component Adaptation
- Navigation: Hamburger on mobile, full nav on desktop
- Grid columns: 4 (mobile) → 8 (tablet) → 12 (desktop)
- Typography: Fluid scaling using clamp()
- Spacing: Reduced on mobile (space-3 between elements)
- Glass blur: Reduced to blur(8px) on mobile for performance
- Cards: Full width on mobile with space-3 gap

Imagery & Media

Photography Style
- Tone: Tech-forward, clean, minimalist
- Color treatment: Desaturated with neon accent glow
- Composition: Centered, modern, geometric
- Subject: Abstract concepts, not product screenshots
- Overlay: Subtle gradient overlay or glass effect

Image Containers
- Aspect ratios: 16:9 for hero, 1:1 for avatars, 4:3 for content
- Border radius: 16px with glass border
- Object fit: Cover with centered positioning
- Effects: Apply subtle glow or gradient overlay

Micro-interactions

Feedback Patterns
- **Button click:** scale(0.98) + glow intensity increase
- **Input focus:** Smooth border-color shift + glow activation
- **Citation hover:** Show tooltip with animated background
- **Result card hover:** Lift effect with blur intensification

Loading Patterns
- Skeleton screens: Shimmer animation with gradient movement
- Spinners: 24px animated gradient spinner
- Progress bars: Gradient-filled progress with animation
- Placeholder text: "Analyzing sources...", "Retrieving data..."

Notification Patterns
- Toast position: bottom-right desktop, bottom-center mobile
- Animation: Slide up + fade in 300ms, fade out on dismiss
- Duration: 5 seconds auto-dismiss (except errors which persist)
- Stacking: Max 3 visible, queue system
- Styling: Glass panel with color-coded border

Content & Messaging

Voice & Tone
- Personality traits: Tech-forward, confident, clear
- Technical level: Accessible, explain concepts as needed
- Emotion: Excited about findings, encouraging exploration

Microcopy Guidelines

/* Success messages */
"✨ Found 50+ sources for your query"
"✨ Analysis complete in 45 seconds"

/* Error messages */
"⎔ No results found. Refine your search."
"⚠ Verification service temporarily unavailable"

/* Empty states */
"Enter a research query to get started"
"No sources archived yet"

Writing Principles
- Sentence case with personality
- Contractions used for friendliness
- Technical terms explained on first use
- Action verbs first and specific
- Emoji used sparingly and purposefully

Data Visualization

Chart Styling
- Color palette: [#00D9FF, #8B5CF6, #EC4899, #F59E0B, #10B981]
- Grid color: rgba(0, 217, 255, 0.1)
- Axis color: #64748B
- Animations: Staggered entrance 600ms each

Chart Principles

- Grid lines: Subtle, barely visible
- Labels: Outside elements, clean
- Legends: Bottom center, horizontal
- Interactions: Hover tooltip with data
- Animation: Smooth drawing effect on load

Dark Mode Adaptation

Color Transformations
- All colors optimized for dark mode
- Text: Light (neutral-100 to neutral-200)
- Backgrounds: Very dark (neutral-800 to neutral-900)
- Accents: Bright (cyan, purple, pink maintained)
- Glass effect: Maintained with adjusted opacity

Special Considerations
- Contrast maintained at WCAG AA+
- Glow effects enhanced in dark mode
- Reduce blur intensity slightly if performance needed
- Glass borders appear as light lines in dark mode

Accessibility Specifications

Keyboard Navigation
- Tab order: Logical left-to-right, top-to-bottom
- Focus states: Always visible (outline + glow)
- Skip links: "Skip to main content"
- Shortcuts: None required for MVP

Screen Reader Optimization
- Landmarks: Semantic HTML (<header>, <main>, <footer>)
- Headings: Strict H1 → H2 → H3 hierarchy
- ARIA: Minimal, semantic HTML preferred
- Live regions: aria-live="polite" for results

Motion Preferences
@media (prefers-reduced-motion: reduce) {
  * { animation-duration: 0.01ms !important; }
  * { animation-iteration-count: 1 !important; }
  * { transition-duration: 0.01ms !important; }
}

Performance Guidelines

Asset Optimization
- Images: WebP with fallback, responsive srcset
- Icons: Inline SVG for control
- Fonts: Variable fonts (Inter) for flexibility
- Critical CSS: Core layout + colors above fold

Interaction Performance
- Response time: <150ms for all interactions
- Animation FPS: 60fps (use transform/opacity)
- Scroll: Passive listeners for performance
- Blur effects: Hardware accelerated (CSS backdrop-filter)

```
## Implementation Checklist

- [ ] Colors verified against palette (exact hex values)
- [ ] All glass panels use backdrop-filter blur
- [ ] Credibility colors applied (cyan/purple/pink)
- [ ] Button glows and shadows present
- [ ] Responsive tested at 375px, 768px, 1024px, 1440px
- [ ] Dark mode tested and verified
- [ ] Animations respect prefers-reduced-motion
- [ ] Keyboard navigation tested
- [ ] Focus states visible everywhere
- [ ] Performance targets met

## Quick Reference

Remember: **Every element floats in space. Every color tells a story. Motion shows intell

When implementing:
1. Start with glass panels and backdrop-filter
2. Add credibility-colored borders and glows
3. Layer elements with intentional depth
4. Animate all interactions
5. Test at all breakpoints
```

</details>

QUICK SELECTION GUIDE

Which designer is right for your Deep Search Research Assistant?

☐ Want professional clarity and academic trust?

→ **Aurora Chen** (Swiss Grid Minimalism)

- Best for: Researchers, academic institutions, data analysts
- Vibe: Clean, trustworthy, organized
- Perfect if: You want users to feel confident in precision

☐ Want bold authority and serious credibility?

→ **Marcus Vonn** (Brutalist Academic)

- Best for: Law firms, policy makers, academic journals
- Vibe: Authoritative, heavyweight, permanent
- Perfect if: You want users to feel they're reading official documents

⬡ Want cutting-edge modernity and tech sophistication?

→ **Nova Ridge** (Glassmorphic Futurism)

- Best for: Tech companies, AI research labs, data scientists

- Vibe: Modern, dynamic, forward-thinking

- Perfect if: You want users to feel they're using cutting-edge tech

USAGE INSTRUCTIONS

1. **Choose your designer** - Which aesthetic resonates with your product vision?

2. **Copy the complete design system** - Find the expandable section and copy everything in the code block

3. **Paste into your AI coding tool** - Cursor, Replit, Windsurf, or your preferred code assistant

4. **Reference when building** - Use the system as your ground truth for all UI decisions

5. **Stay consistent** - Every component should follow the design system exactly

All three design systems are production-ready and can be implemented immediately by your engineering team. Choose based on your product's personality and your target audience's expectations.

⬡ Which one speaks to you?

[1]

⁂

1. ui-design-prompt.md