Duncan McAlester

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EXECUTIVE SUMMARY

Product-minded design leader with 30+ years of experience building and scaling digital products, platforms, and teams. I operate at the intersection of design craft, engineering reality, and business strategy—translating complexity into clarity and abstract ideas into shipped outcomes. Background spans enterprise, government, and startup contexts, with deep experience in constrained environments where quality, accessibility, and durability matter.

I build teams that are collaborative, empowered, and focused on outcomes over optics. Hands-on when execution demands it, strategic when the problem requires it. Colleagues describe working with me as "working with a crystal ball"—constantly thinking ahead about technology shifts and organizational impact while staying grounded in present constraints.

KEY QUALIFICATIONS

- **Cross-Disciplinary Fluency:** Equally comfortable in design craft, technical architecture, and business strategy; collaborate with engineers as a peer, not a hand-off point

- **Team Building:** Built and scaled teams from 3 to 20+; hired across disciplines, developed senior ICs into staff-level leaders, and created structures that outlast any single contributor

- **Culture & Psychological** Safety: Foster environments where teams take ownership, challenge ideas constructively, and do their best work without fear of failure

- **Mentorship:** Published author, university instructor, and hands-on mentor known for making complex ideas accessible and sharing knowledge without gatekeeping

- **Systems Thinking:** Frame problems as systems with inputs, constraints, and feedback loops; anticipate downstream effects and design for durability over novelty

- **Strategic & Tactical Range:** Set multi-year vision and roadmaps while staying close enough to prototype, debug, and ship when execution demands it

- **Measurable Impact:** Track record of business outcomes—30-50% efficiency gains, $6.5M in secured funding, 30x adoption growth

- **Executive Communication:** Translate technical tradeoffs into business language; comfortable presenting to leadership, finance, and cross-functional stakeholders

- **AI & Emerging Tech:** Practical, outcomes-driven application of AI to workflows—skeptical of hype, focused on leverage and real productivity gains

EXPERIENCE

DIRECTOR OF PRODUCT DEVELOPMENT, ROCKET — 2024-NOV 2025
Lead cross-functional team delivering design system innovations and products for mission critical satellites operations centers.

Framework Evolution & Innovation
- Pioneered AI-driven component generation, reducing delivery from weeks to minutes while maintaining pattern consistency
- Extended design system frameworks into new contexts including e-commerce and secure environments
- Evolved prototyping and validation workflows, cutting iteration time by 50%

Cross-Functional Leadership
- Guide cross-disciplinary team (designers, engineers, content) in framework development and adoption
- Mentor designers in systems thinking, helping articulate tradeoffs and design rationale
- Balance strategic vision with hands-on craft, delivering production-ready frameworks under compressed timelines

DESIGN SYSTEM PRODUCT DIRECTOR, ROCKET — 2019-2024
Owned end-to-end strategy, governance, and delivery of the Astro UX Design System—scaling adoption from 6K to 200K annual downloads across 40+ organizations including Fortune 500 enterprises.

Scalable Framework Design
- Designed and evolved modular UI frameworks powering digital experiences across web, desktop, and specialized embedded platforms
- Created cross-platform patterns balancing reusability with platform-specific requirements
- Defined core design tokens (typography, color, spacing, motion) forming the foundation for consistent, brand-aligned experiences

Documentation & Enablement
- Built comprehensive pattern documentation with clear specs, rationales, and usage guidance
- Established docs-as-code workflows improving maintainability and developer adoption
- Created templates and examples that reduced friction for product teams adopting the system

Governance & Quality at Scale
- Established versioning practices, contribution models, and feedback loops supporting 200+ consuming projects
- Created compliance tier system enabling gradual adoption without blocking delivery
- Embedded accessibility (WCAG AA) and performance standards into framework foundations

Cross-Functional Partnership
- Collaborated with Product and Engineering to align visual frameworks with technical architecture
- Built industry-wide community connecting designers, engineers, and stakeholders
- Communicated tradeoffs clearly to leadership; secured $6.5M funding by demonstrating 30-50% development time savings

DIRECTOR OF ENGINEERING, ROCKET — 2017–2019
Founded engineering department, establishing technical standards and team culture.

- Built engineering team from 1 to 12, establishing processes and hiring frameworks
- Expanded company from design consultancy to full product delivery capability
- Created foundation for design-engineering partnership that enabled system success

EXPERIENCE (CONT)

LEAD DESIGN ENGINEER, ROCKET — 2015–2017

Launched the SATCOM UX Design System and later the Astro UX Design System, commissioned by U.S. Space Force for mission-critical operations.

- Architected modular component library (20+ components) cutting front-end development time by 30%
- Defined and implemented design tokens creating scalable, brand-consistent foundation
- Developed prototype applications showcasing system integration—recognized by Dan Mall as exemplary design system storytelling
- Introduced systematic documentation practices improving adoption and maintainability

DESIGN TECHNOLOGIST, LAYER 51 — 2004–2015

Foundation in UX, engineering, and product development across commercial, government and enterprise:

- Designed and developed a custom pizza ordering system, reducing operational costs by $20,000 annually across over 100 locations.
- Designed and engineered a calendaring system for Senator Ted Kennedy's office, centralizing data entry and cutting staff completion time by 50%, boosting operational efficiency.
- Created the front-end for a custom content management system used by more than 50 US Senate offices, demonstrating significant adoption and impact on legislative operations.
- Designed and implemented front-end solutions recognized with multiple Gold and Silver Mouse awards, highlighting excellence in Congressional websites.

SENIOR DESIGN ENGINEER, LATHIAN SYSTEMS — 2002–2003

- Implemented DevOps practices and refactored legacy code, greatly improving developer efficiency and code delivery speed.
- Led product development for a new telemedicine service, increasing profit margins by 300% compared to existing offerings.

USER EXPERIENCE DESIGNER, BREATHE DESIGN — 1998–2002

Executed multiple high-impact digital and print media campaigns for major clients such as: Walt Disney Co., Toyota, Ford/Lincoln/Mercury, Warner Bros, 20th Century Fox, Sony Pictures, Sea World, Busch Gardens, UCLA Harbor Pediatrics, Pioneer Electronics

> *Duncan's enthusiasm was contagious at Rocket — I always looked forward to getting his messages about newly released CSS/browser features or his "what if we tried this?" ideas for our design system/ component library. It's this depth of coding knowledge in addition to his leadership skills sets him apart from others in his role.*

– Kiley M.
https://www.linkedin.com/in/dmcalester/details/recommendations/

PUBLICATIONS

- Co-author: McAlester, Duncan. Capraro, Michelangelo. *Skip Intro: Usability and Interface Design for Macromedia Flash*, New Riders Press, 2002
- Co-author: McAlester, Duncan. Capraro, Michelangelo. *Macromedia Flash MX 2004 Magic*, New Riders Press, 2004

AWARDS

- Macromedia People's Choice Award for Branding & Corporate Identity
- Multiple Gold Mouse Awards for Best Congressional Web Site
- Multiple Silver Mouse Awards for Best Congressional Web Site
- Design System recognized externally by Dan Mall as a model of design system storytelling

SELECT SPEAKING & TEACHING ENGAGEMENTS

- Teaching (University of California [UCI], University of Nebraska Omaha [UNO], Laguna College of Art and Design): Courses in color theory, web development, and multimedia design.
- BayCHI, Bay Area Computer Human Interaction Group, XEROX PARC
- OCCHI, Orange County Computer Human Interaction Group
- FlashForward San Francisco
- FlashForward New York
- University of California at Irvine
- University of Nebraska at Omaha
- Enterprise Ground Services UX Working Group
- BMC3I Innovation Hub in Colorado Springs

EDUCATION

LAGUNA COLLEGE OF ART AND DESIGN — 1993 – 1998
Bachelor of Fine Arts

" Working with Duncan is like working with a crystal ball. He is constantly thinking ahead, considering new developments in tech (especially AI), systems thinking, design systems and role of design in general. "

– Andrew A.
https://www.linkedin.com/in/dmcalester/
details/recommendations/