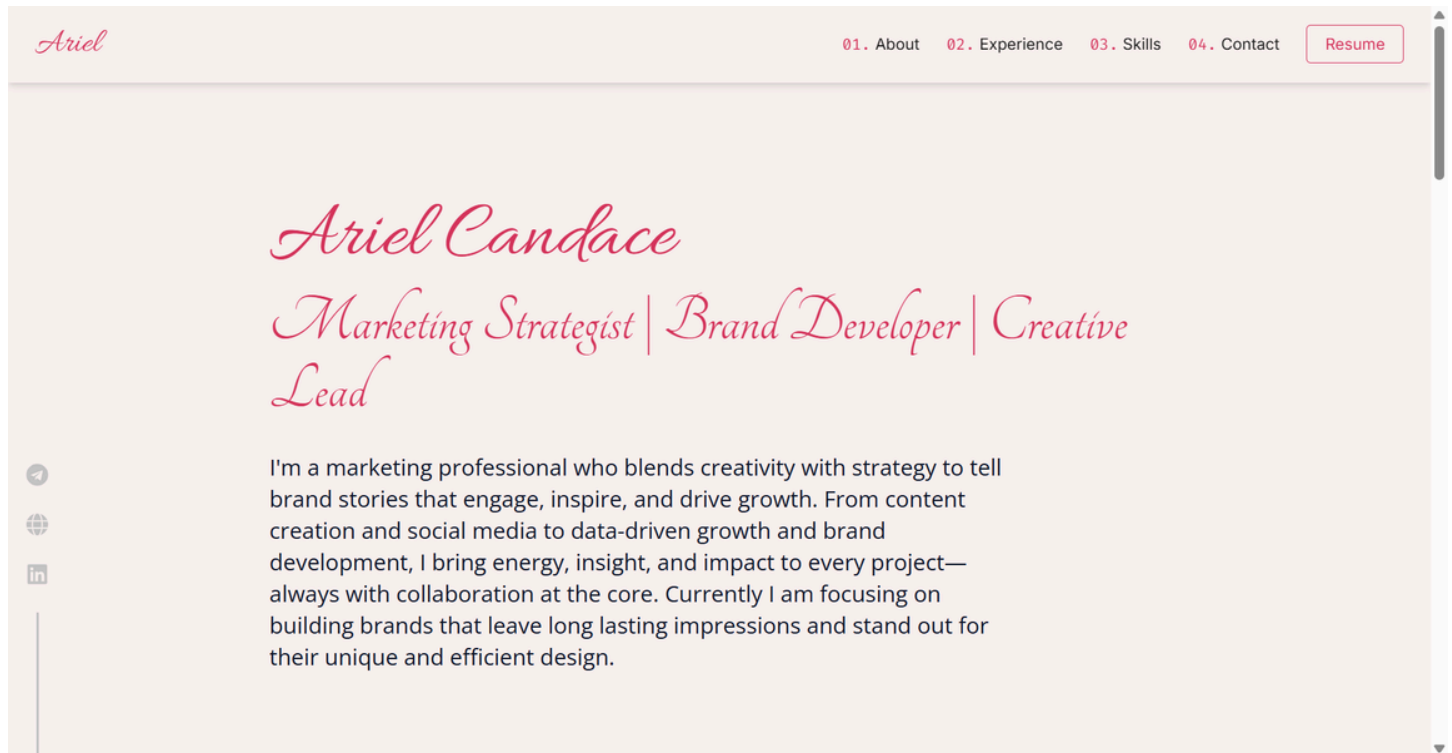


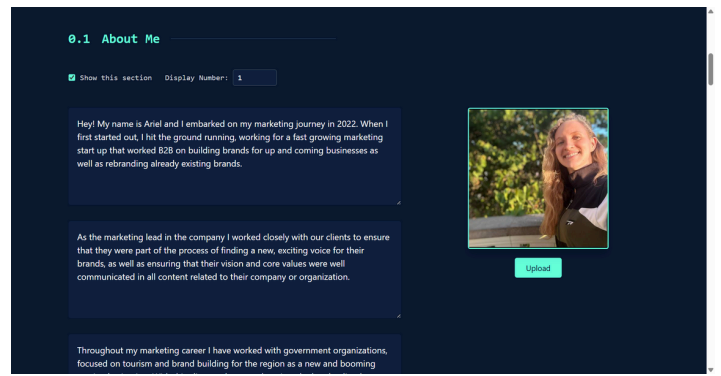
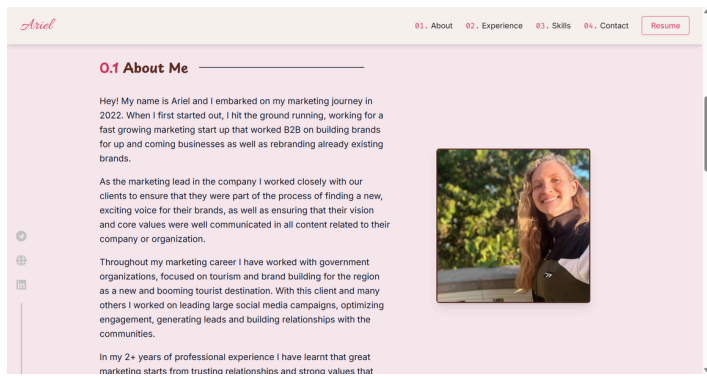
Case Study: Custom CMS-Enabled Portfolio

By Gideon Cameron | Frontend Developer



Project Overview

A client requested the ability to edit their portfolio after launch. I developed a CMS-enabled portfolio using React, TypeScript, Tailwind, and Firestore. The solution allows admins to update content, hide/show sections, and manage portfolio details without needing a developer.



Challenges & Solutions

Challenge 1: Section visibility.

If a section was missing info, or the admin wasn't interested in using that section, then the section needed to be hidden

Challenge 1: Solution.

Added a toggle button so that the admin could chose if a section was displayed, and added logic so that if a section was empty it would not display.

Challenge 2: Numbering & order consistency.

If a section was removed, then the section number needed to change to reflect that.

Challenge 2: Solution

Created a toggle so the admin can change the section number if they make changes.

Challenge 3: Full control over content.

The admin needed to be able to add, remove or delete any content without breaking the layout or leaving info that should be removed

Challenge 3: Solution.

Created CRUD forms where the admin could make any changes needed with empty states handled in UI.

Challenge 4: Performance & load strategy.

Initial load should feel fast and focused on the hero section. The rest should load as they are needed.

Challenge 4: Solution.

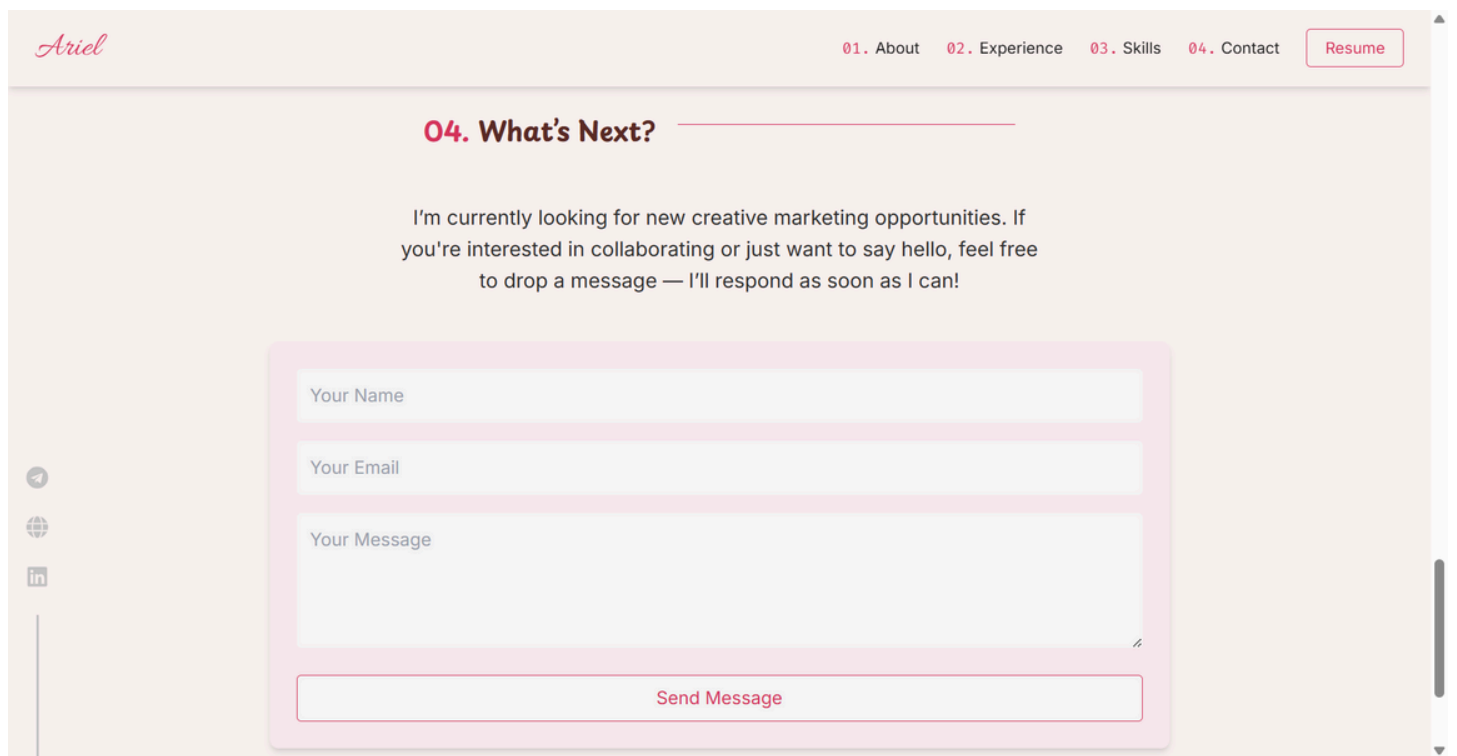
React lazy() + Suspense for section-level code splitting; hero renders first, others load on demand.

Results & Impact

The CMS gave the client full control over their portfolio, saving time and reducing dependency on a developer. The system is reusable, allowing me to set up similar portfolios in hours instead of weeks. This project strengthened my React and Firestore skills and proved the value of flexible, scalable design.

Key Features (Quick Hits)

- **Dynamic Content Rendering** → Portfolio reads from Firestore; updates appear instantly.
- **Reusable Architecture** → Config-driven sections + Tailwind tokens = fast setup for future clients.
- **Netlify Deploys** → CI/CD with environment variables for per-project Firebase configs.
- **Faster client onboarding** – reduced portfolio setup time from *days/weeks* to just a few hours.
- **Independent content management** – clients can update text, sections, and order without developer support.
- **Flexibility** – sections can be enabled/disabled, reordered, or edited to fit different client needs.
- **Error prevention** – built-in failsafes (like section hiding and numbering logic) prevent broken layouts or incomplete content.
- **Scalable framework** – system can be reused for future clients with minimal setup.
- **Live sync** – instant updates from Firebase → changes appear immediately on the portfolio site.
- **Professional polish** – admin dashboard with authentication ensures only authorized edits.



Live Site: ariels-portfolio.netlify.app

We will not be including the link to the admin site as it is secured for the client, but if you want to contact me for your own portfolio, my info is down below.

Contact info

- 1: LinkedIn: <https://www.linkedin.com/in/gideon-cameron/>
- 2: GitHub: [🌐 Gideon-Cameron - Overview](#)
- 3: Portfolio: [🌐 Gideon Cameron | Frontend Developer](#)