

Dan R. Branch

Chichester, UK
dan@mxbranch.com

Full stack web developer with an engineering and teaching background. Moved to commercial software development post-COVID, supporting the delivery of unique client-focused applications and quickly becoming the primary contact for new and existing clients. Looking for new challenges, especially those focused on accessibility and user experience.

Work History

Under One Cloud

Lead Software Developer, November 2022 to September 2026

Maintained, improved, and ultimately fully rebuilt two undocumented legacy systems (ASP.NET WebForms) for clients, acting as lead developer, primary client contact, and overall system architect:

- A learning management system, which needed to meet the standards set by industry competitors.
 - Delivered a full stack Next.js application compatible with xAPI standards using modern React design patterns.
 - Enforced use of TypeScript for internal API consistency between team members.
 - Implemented a CI pipeline using GitHub Actions and Container Registry.
 - Deployed to production with Docker, MariaDB, and Linux, using a blue-green approach to minimise downtime on feature pushes.
 - Result: Client was able to expand their eLearning operation to ~1800 users and contracted UOC for additional development beyond original project scope.
- A warehouse management system, which needed to meet the growing e-commerce needs of the company and their multiple online stores.
 - Collaborated with client to facilitate rearchitecting features to improve their business workflows.
 - Completed work on the authentication subsystem, API system architecture, a modular data table component with file export options, the internal customer management system, and the stock management system. Initiated work on the sales order workflow system.
 - Elected to use monorepo tooling which could handle multiple front-end websites sharing back-end packages like component libraries and database configurations.
 - Architected system for serverless deployment on the edge to anticipate global customer base.

Designed fast, accessible, and responsive marketing websites, using static site generation (Astro) or Jamstack (Next.js + Payload) depending on client requirements.

Managed and updated clients' existing WordPress websites.

Cantell School

Teacher of Computer Science, September 2016 to August 2022

- Taught IT and Computer Science classes across Key Stages 3 and 4.
- Led the GCSE Computer Science curriculum, achieving results above the national average every year.
- Helped redevelop the KS3 curriculum on the topics of programming and computer hardware.
- Created lesson plans to teach Python programming fundamentals for use by other staff members.
- Ran a creative computing club focused on helping students develop tech literacy.

Skills And Interests

This is a non-exhaustive list.

Web Fundamentals

Semantic HTML, modern CSS features and methodologies, Tailwind, vanilla JavaScript and TypeScript

Frameworks

React, Next.js (App Router and Server Components), Astro, CMSs (Payload, WordPress)

Back End

Node, REST APIs, ORMs (Drizzle, Prisma), SQL, MySQL, MariaDB, Postgres, Docker, Linux Servers

Education

MEng in Electronic Engineering with Mobile and Secure Systems

First Class, University of Southampton, September 2010 to June 2014

SCITT/PGCE in Education

Bromley School's Collegiate & Canterbury Christ Church University, September 2015 to July 2016

Other Work

Programming

An 'infinite mixtape' website which plays a large number of tracks in a randomised order while displaying related artwork, links, and messages (client-side React SPA using S3 storage).

A multiplayer web-based game designed in collaboration with a Twitch streamer (full-stack application using React, Tanstack Start, and OAuth).

Music Composition

Independent music featured in The Adventure Zone podcast and in public art installations in London.

Scored animated shorts for clients and other creatives, incorporating multiple feedback rounds to arrive at a satisfying product.