

# CONNOR HESSMONDHALGH

 [github.com/ches7](https://github.com/ches7)

## PROJECTS & SKILLS

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PROJECT	<b>Real Estate Company</b>
LINKS	<b><a href="https://chesm.xyz">chesm.xyz</a>, <a href="https://github.com/ches7/real-estate">github.com/ches7/real-estate</a></b>
TECHNOLOGIES	<b>Express.js, Node.js, React, Bootstrap, MongoDB, MySQL, AWS, Docker, Nginx, Javascript, HTML, CSS</b>
	<p>This project is loosely based on the Zoopla website - with ability for users to search for and view properties and agents, register an account to save properties, and for agents to upload properties. The project uses an Express API connected to a MongoDB database containing property data, and a MySQL database containing user data, a React frontend, an AWS S3 bucket to store uploaded photos and provide custom URLs for viewing photos, and Mapbox to display maps. The project uses Nginx both to serve static React files and as a reverse proxy in order to connect to the API from the frontend. The project runs inside docker containers and stores JWT tokens as cookies when users log in and certbot to enable HTTPS. Most of the technology used to build this project was chosen for the purposes of learning, however some decisions were made to make use of a certain technology's unique features. For instance, MongoDB was used for storing property data as it has built in geospatial queries, which were useful when querying the database for a property with a given radius, and Docker was used to ensure the development environment was more consistent with the production environment.</p>
PROJECT	<b>Forum</b>
LINKS	<b><a href="https://forum.chesm.xyz">forum.chesm.xyz</a>, <a href="https://github.com/ches7/php-forum">github.com/ches7/php-forum</a></b>
TECHNOLOGIES	<b>PHP, Laravel, Tailwind, MySQL, Nginx, Javascript, HTML, CSS</b>
	<p>This project is simple forum website where users can view, create and edit and reply to posts. The project uses the PHP Laravel framework with Blade templates, Breeze and Tailwind CSS. It interacts with a MySQL database using the Eloquent ORM and is served using Nginx.</p>
PROJECT	<b>Graphical User Interface for Soil Plasticity Constitutive Models Testing</b>
LINKS	<b><a href="https://github.com/ches7/incremental-driver-GUI">github.com/ches7/incremental-driver-GUI</a></b>
TECHNOLOGIES	<b>Python, PyQt5</b>
	<p>This was a project completed for university, it is a desktop graphical user interface that takes in certain parameters related to the physics of soils and produces a text output to be fed into a FORTRAN program.</p>
SKILLS	<b>Linux</b>
	<p>I have compiled a fully functioning linux operating system from source code inside a QEMU virtual machine. I have also wrote numerous scripts in C, bash and python for small personal projects that run on linux.</p>

## EDUCATION

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DEGREE	<b>Bachelor of Engineering in Civil Engineering</b>
CLASSIFICATION	<b>Upper Second Class Honours</b>
UNIVERSITY	<b>Coventry University</b>

A LEVELS	<b>Maths, Physics, Design &amp; Technology, Advanced Welsh Baccalaureate, Silver Duke of Edinburgh Award</b>
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GCSEs	<b>13 GCSEs including Maths, English, Physics, Electronics</b>
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