April 17, 2025 Magenta Cuda

WebSites: m-cuda.eu5.org, m-cuda.dx.am

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Dear Possible Employer,

Since 2012 I have been doing WordPress/WooCommerce development using PHP 8, MariaDB 10, Bootstrap v5, Dart Sass 1.83 and jQuery v3.7. I have working knowledge of WP-CLI, phpMyAdmin, Visual Studio Code for PHP and KCachegrind. My areas of expertise are "Classic" WordPress (pre-Gutenberg) and the WooCommerce PHP Core (pre-Gutenberg). I desire remote work as a freelance WordPress/ WooCommerce PHP developer (no Gutenberg).

. My specialty is debugging and optimizing WordPress PHP code using **Visual Studio Code for PHP** and **KCachegrind**. I have also developed my own tools for analyzing WordPress PHP code: **WMP** and **DDT**. WMP - WordPress Manual Profiler - is a tool for analyzing WordPress actions and filters. DDT - Database Debugging Tool - is a tool for diffing database tables before and after WordPress invocations.

## Selected works:

## Simple Variations

Simple Variations for WooCommerce implements the variations of a WooCommerce variable product as the Cartesian product of its attributes. Some new techniques were found to overcome some difficulties with WordPress. I implemented a technique for wrapping WordPress's actions and filters. This allows the preprocessing of the arguments to and the post-processing of the result from a call to a hook in the context of the wrapper. I further found a technique for postponing the call to wp\_die() so the wrapped hook returns to the wrapper instead of exiting. WooCommerce is inconsistent in instantiating some classes – some times it uses a factory and other times it directly uses "new Some\_Class( ... )". This makes it difficult to use subclassing as a means to override the methods of some classes. This was solved using some ugly ad hoc techniques that work. Further, since the Cartesian product may have a really huge number of variations and processing these variations may exceed PHP's execution time limit, it was necessary to implement a way for a single task to span multiple PHP sessions. Lastly, I wrote a proprietary implementation of virtual variations where the variations are dynamically computed from its components.

## • Backbone Bootstrap Gallery

This is a WordPress plugin that implements WordPress galleries as a SPA using a **Backbone.js** Model-View-Presenter (MVP) populated via the **WordPress REST API**, styled by a **Twitter Bootstrap 3** stylesheet and with touch support provided by components from **jQuery Mobile**.