

## Social

[WordPress](#)

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## Tech Skills

WordPress

Full-stack

WP security

WPBlocks/Gutenberg

Woocommerce

Elementor

Linux

## Soft Skills

Problem solving

Mentoring

Peer review

Pair programming

Critical thinking

Self motivated

Decision making

Technical

communication

## Personal Blog

<https://www.vijayan.in/>

## Certificates

[Gutenberg Blocks for WordPress and React Developers - Udemy](#)

[Front End Development Libraries - freeCodeCamp](#)

[JavaScript Algorithms and Data Structures - freeCodeCamp](#)

[Responsive Web Design - freeCodeCamp](#)

[Python \(Basic\) - HackerRank](#)

[CSS \(Basic\) - HackerRank](#)

## Work Experience

### Independent Contractor

[www.incsub.com](http://www.incsub.com)

May 2021 – Dec 2023

### Independent Contractor

[www.analogwp.com](http://www.analogwp.com)

Jun 2020 – Feb 2021

### Senior Software Engineer

*Salzer Technologies Pvt. Ltd., Chennai*

Aug 2015 – Feb 2020

### Senior Programmer

*Infowave Knowledgeware Pvt. Ltd., Chennai*

May 2014 – Aug 2015

### Programmer

*Insoft.com Pvt. Ltd., Chennai*

Mar 2013 – Apr 2014

### Junior Programmer

*You Dream We Develop Pvt. Ltd., Coimbatore*

Jan 2011 – Mar 2013

## Education

### B.E – Computer Science and Engineering

*Tamilnadu College of Engineering, coimbatore*

2006-2010

**DEFENDER SECURITY** - <https://wordpress.org/plugins/defender-security/>

- Defender Security is a freemium model and widely using security plugin
- Pro link: <https://wpmudev.com/project/wp-defender/>
- Transpiled the whole plugin source code (50,000+ lines of code) from PHP 5.6 to 7.2 with in 15 days and later from PHP 7.2 to 7.4 using rector CLI tool
- Improved the scan completion rate and performance by refactoring the code from long polling (recursive AJAX request) to PHP background processing using [Action Scheduler](#) asynchronous background processing package
- Reduced the plugin size in many ways like
  - In Tailwind CSS configuration, found tree shaking option is missed therefore just by enabling this reduced CSS file size 75% to 80% in chunked CSS asset files in production build
- Did a R&D with implementation of a new pro feature, safe repair and quarantining the malware affected or modified file
  - Documentation link: <https://wpmudev.com/docs/wpmu-dev-plugins/defender/#quarantine-malware-scanning>
  - Before repair a file, copy the original local file in secure quarantine directory then pull the plugin file from WP plugin repository
  - Added build logic to exclude quarantine related classes and components during building free version zip archive by using node packages grunt-composer & grunt-contrib-copy
  - Implemented upsell UI (modal) in free variant with listing of quarantine marketing copy
- Refactored source code of both front-end (Vue, Vuex, CSS sass to Tailwind classes) and back-end
  - By following the DRY principle, refactored Free & Pro bootstrap files resulted in roughly 1000 lines of code into less than 450 lines of code.
  - Resolved a memory overflow issue which happened when fetching data of scanned issue items
    - By replacing fetching records and doing [aggregate calculation in PHP array](#) to [SQL super-aggregate summaries](#) ([older](#) & [newer](#) method declaration)
    - Improved the performance more than 90% in highly affected site i.e. more issues leads to thousands of scan items recorded in the table fetching all causes memory issue or in short resolved a scalability issue
  - Resolved code complexity by changing reflection based method invoking to DI (Dependency Injection)
  - Removed many dead codes in project base
    - Removed nowhere invoked methods like [events](#), [has\\_event](#), [on](#), [off](#), [trigger](#), [detach\\_behavior](#), [has\\_behavior](#) also removed entire parent class [Calotes\Base\Base](#) but moved only invoked method to Component class ([Calotes\Base\Component::log](#)) which reduces the maintenance of the project in the long run

- In class [Calotes\Component\Behavior](#) removed methods [attach and detach](#)
- In frontend refactored Vuex accessing code by using [binding helpers](#) results in lots of lines of code reduced in component also less error-prone access of Vuex store states and methods
- Defender using in-house UI utility framework [shared-ui](#) version 2, refactored repeatable HTML structure into Vue component for reusability lets to reduction of many line of code
- Created initial prototype of [Global IP](#)
- Improved performance and user experience in IP lockout log listing when user wants to see all logs at a time
  - Implemented lazy loading of records using the HTML [Intersection Observer API](#)
  - Therefore once the scroll-bar reached a certain distance in the screen then an AJAX request to fetch next set of records for rendering instead of showing all records at a time (this is previously implemented logic which is resource hogging in high volume logs existing site)
- Implemented security tweaking feature of avoiding user enumeration
- Implemented rotational logger as like as Linux rotational logger to overcome storage spacing concern
- Implemented few new WP CLI command for [firewall](#)
- Implemented client IP address detection logic with more control to configure proxy servers
  - Source code: <https://plugins.trac.wordpress.org/browser/defender-security/tags/4.4.1/src/component/http/remote-address/remote-address.php>
  - Inspired from Laminas framework composer package "laminas/laminas-http"
  - Architectural decision: Implemented [strategy pattern](#) to invoke classic and newly implemented IP detection logic based on end user chosen option, with default fallback to classic IP detection

#### STYLE KITS - <https://wordpress.org/plugins/analogwp-templates/>

- Style Kits is an add-on plugin to extend the Elementor theme style
- My responsibility is refactoring or adding new features
- Refactored blocks library admin page to use wp.components module
- GitHub PRs: <https://github.com/analogwp/analogwp-templates/pulls?q=author%3Agvgvgvijayan+>
  - Listing few notable contributions
    - [Implemented Elementor style for hyperlink](#)
    - [Fixed button background style issue](#)
    - [Implemented default global settings for StyleKits](#)

- [Implemented table listing for Style Kits in admin page](#)
- [Complete redesign of blocks library](#)
- This plugin has premium plugin with advanced style controls, kit switcher and post grid modules
- Customer support for both open-source and premium plugins

#### **OQ MEASURES** - <http://www.oqmeasures.com/>

- Involved in integrating Contact Form 7 with the Zoho CRM lead
- When a user submits the form, the submitted data will be synced to the Zoho CRM lead
- We used the plugin: <https://wordpress.org/plugins/cf7-zoho/>

#### **WHEELER OPERA HOUSE** - <https://www.wheeleroperahouse.com/>

- Version worked: <https://web.archive.org/web/20181102000214/https://www.wheeleroperahouse.com/>
- This WordPress application is used showcase events going to show in opera
- We customized the All in one event calendar to the customer needs
- Customized monthly calendar to show events on respective date tiles
- Show and remove events based on the show date dynamically
- Customized grid list of events to show with external buy ticket option

#### **MCCALLMETHOD** - <https://mccallmethod.com/>

- Version worked: <https://web.archive.org/web/20190518101904/https://mccallmethod.com/>
- This WooCommerce project's main idea is to sell the movement therapy downloadable video digitally
- We implemented the WooCommerce with HSS cloud service to provide the purchasing provision of the video product
- Once user purchased the video, it will download in many customized resolution at anytime by logged-in the application
- Other than video, user can purchase the book and DVD

#### **FUNCTIONAL FITNESS** - <http://functional.fitness/>

- Version worked: <https://web.archive.org/web/20230225111706/http://functional.fitness/>
- Build workout management system, statistics graphs of total users, exercise, workouts
- The gym admin create dynamic workout using many template like WOD (workout of the day), Interval, Circuit, Tandem, HIIT etc.,

- Based on the template type chosen, admin create the structure of the workout and post the workout to their desired gym location with medium like TV, Mobile and Kiosk
- Each posted workout live for span of chosen from and to date. Once the workout expired, it won't be shown to user
- Created REST API for listing workouts with exercise in various categories

## PLUMBERNOW

- This mobile app is used to book plumber(s) remotely
- Responsible for creating all the web services and push notification using FCM and APNS in Laravel
- Once user logged in he can view all available plumbers in map, user can choose a plumber or post his request
- Interested online plumbers show their interest
- User in his application can choose any one plumber company to fix their plumbing issue
- Plumber company notified about their job. Dispatcher can assign n number of plumbers to the job
- Once the job done user rates the plumber after that plumber can rate the user and finish the job

## MAITRA 2.0 - <https://sourceforge.net/projects/maitra/>

- This is an open source application for ICG (Indian Coastal Guard) which provide two services they are track office's in/out postal mail and physical files movement from different department
- We implemented the recording system to record the in and out mail with simple search
- For physical files, we do a hopping process to check in/out files to various department
- Each of the files are tracked by QR code which holds the file's unique id with CRC (Cyclic Redundancy Check)
- In file we stick the thermal printed QR code sticker which is generated and printed during the physical file detail is entered once in our system
- The user can take n number of thermal sticker printing using our application if physical file needs to be renewed
- For thermal printing, we used Brother printer's JavaScript SDK
- We implemented parent / child logic to handle division and subdivision

**SHOWONTHECLOUD** - <http://showonthecloud.com/>

- Version worked: <https://web.archive.org/web/20150708023841/http://showonthecloud.com/>
- This presentation tool is developed using Yii framework
- We created backend system for admin to create presentation
- The presentation tool consists of a simple editor with media uploading feature
- The presentations are shown as grid / list view with search filter and sorting functionality
- We created web service for grid list API and individual presentation's detail API

**TEDA** - <http://www.tedawop.in/>

- Version worked: <https://web.archive.org/web/20151011222721/http://www.tedawop.in/>
- It's an ERP we developed for Tamil Nadu Energy Development Agency
- In application, the administrator can add beneficiary with search and sort option
- This application's main purpose is to track beneficiary whether got his/her allotted LED light unit
- Exporting beneficiary based on different filter criteria as formatted excel