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Skills & Expertise

- Backend Technologies:
 - Linux
 - Apache / Nginx
 - MySQL
 - PostgreSQL
 - PHP
- Moodle Expertise
 - Custom plugin development
 - Theme customization
 - System optimization
- Frontend Tools
 - HTML
 - CSS
 - JavaScript
 - AJAX
 - jQuery
 - React.js
 - Redux
 - BootstrapCSS
 - TailwindCSS

Experienced **Web and Moodle Developer** with a Bachelor's degree in Computer Science and over 12 years of expertise using the LAMP stack. Proven ability to design, develop, and maintain scalable web applications and Moodle-based platforms for a diverse range of clients, including educational institutions, government organizations, and private enterprises. Maintainer of the official **mod_journal** Moodle plugin and proficient in full-stack development, API integration, and plugin creation. Quick learner, team player, and adept at delivering innovative, client-focused solutions.

Experience

10/2012 to present

Web Developer - Elearning & Software SRL

- *Moodle Plugin Development:* Design, develop, and maintain custom Moodle plugins to extend platform functionality, including features like advanced reporting, user management, activity customization and seamless integrations with third-party services.
- *Full-Stack Web Development:* Develop responsive web applications using the LAMP stack, delivering tailored solutions for standalone projects and critical components of larger systems.
- *Client Collaboration and Requirement Analysis:* Work closely with clients to gather, clarify, and refine project requirements, translating their needs into well-architected web applications utilizing modern frontend (JavaScript, HTML, CSS) and backend (PHP) technologies.

Education

Universitatea de Vest Vasile Goldis, Arad (2014)

Bachelor's Degree in Computer Science

Representative projects

Moodle Quizzes Report Plugin (2012) (cursuri.uvvg.ro)

Client: *Universitatea de Vest Vasile Goldis, Arad*

Developed a custom Moodle plugin to generate advanced quiz reports tailored to the institution's requirements.

Moodle-Based Web Application (2015–2016) (vic.eeirh.org)

Client: *East European Institute for Reproductive Health*

Built a fully customized Moodle platform to enhance online course delivery and management.

Skills & Expertise

- Frameworks & Platforms:
 - Moodle
 - Laravel
- Version Control
 - Git
 - Github
 - Gitlab
- APIs & Data Formats
 - RESTful APIs
 - JSON
 - XML
- Development Environment
 - Docker
- Dependency Management
 - Composer
- Other Skills
 - CI/CD pipelines
 - Unit Testing
 - OOP
 - Networking
 - Debugging
 - Performance Tuning

Languages

- English - advanced
- Romanian - native

Moodle Plugins for User and Course Management (2016–2018) Client: *Faxmedia (e-learning.faxmedia.ro)*

Designed and maintained Moodle plugins for user and course management. Integrated billing API (smartbill.ro) for automated invoicing.

Web Application for Learning English (2016–2018)

Client: *Lango (lango.io)*

Created a Moodle-based platform for live English lessons, connecting users with teachers via live streaming classes. Developed a booking calendar, notification system, and integrated APIs for WordPress SSO, Mandrill (email), Webex (live classes), Stripe (payment), and Learning Locker LRS (data storage).

Gamification Web Application (2016–2017)

Client: *Lattanzio Group*

Designed and developed a gamified learning platform using the LAMP stack, based on custom specifications provided by the client. Application deployed on the client's intranet for employee engagement.

Single-Sign-On System for Moodle School Network (2017–2018)

Client: *Rețeaua EDU (reteauaedu.ro)*

Implemented a custom API-based SSO system for a Moodle school network, streamlining access across multiple educational platforms.

Teacher Assessments Web Application (2017–2018)

Client: *Universitatea de Științe Agronomice și Medicină Veterinară din București (usamvb.moodle.ro)*

Built a Moodle-based application enabling students to evaluate teachers, with detailed reporting for university management.

City Council Management Platform (2019–2024)

Client: *Faxmedia (emol.ro)*

Developed a web application for mayors and councils to present activities, share public documents, vote on projects, and generate reports.

EU Customs & Taxation Learning Portal (2020–2024)

Client: *European Union Institutions (customs-taxation.learning.europa.eu)*

Contributed to a Moodle-based learning portal for EU employees, focusing on compliance training and educational content delivery.

Cernavodă Nuclear Power Plant E-learning Platform (2024)

Client: *Cernavodă Nuclear Power Plant (cbtsnn.nuclearelectrica.ro)*

Contributed to a Moodle-based learning portal for Cernavodă Nuclear Power Plant employees, Moodle - AD integration, custom user & resource management, detailed reporting.

Moodle Plugin Development and Optimization (2024–2025)

Client: *Bamento, Italy*

Developed and enhanced custom Moodle plugins for a school client, including support for quizzes and SCORM activities, responsive workplan improvements for web and mobile, UI refinements, and production deployment adjustments. Investigated and designed a performance optimization strategy for a large-scale learner activity plugin and enabling efficient long-term log management.

Custom CATQuiz Moodle Plugin Development (2025)

Client: *Quantum Exams, LLC, USA*

Designed and developed a custom Moodle CATQuiz plugin based on Adaptive Quiz, adding built-in timer functionality, score reporting by categories/domains, and post-exam review capabilities. Extended the plugin with configurable score scaling, answer distribution and attempt graphs, student review-page improvements, and UI refinements for quiz completion and results pages. Also prepared technical and user documentation, set up a dedicated development environment, and supported testing, staging, and production deployment coordination with the client.

Custom Moodle Analytics Plugin (2025)

Client: *lern.link, Germany (end client: ETH Zurich)*

Specified and developed a custom Moodle quiz analytics/reporting plugin with advanced filters, multi-format exports, question-quality statistics, scatter-plot visualizations, and detailed response-analysis tables for educational assessment workflows.

AI Integration Plugins for Moodle 4.5 (2025)

Client: *lern.link, Germany*

Designed and specified two integrated Moodle plugins for AI-powered course support: a block plugin for chat-based tutoring, Q&A, and automated content generation, and a local connector plugin for secure communication with the Tarsus Brain AI service. The solution included educational material upload and analysis, AI-assisted generation of lessons, quizzes, and glossaries, automatic import into Moodle courses, role-based instructor/student workflows, API and credit management, configurable global settings, and an extensible plugin architecture for future AI providers.

Moodle Quiz Access Plugin Development (2025–2026)

Client: *lern.link, Germany (for ETH Zürich)*

Built and delivered a custom Moodle quiz access plugin for controlling concurrent quiz sessions, including role-based permissions, admin/teacher settings, multilingual support, workflow refinements, testing fixes, and publication to the Moodle plugin directory.

AI Assessment Activity Plugin for Moodle (2025–2026)

Client: *Lemberg / eLeDia, Germany*

Built a custom Moodle activity for AI-based writing evaluation, including secure API integration, asynchronous processing, polling and callback workflows, configurable grading/pass thresholds, teacher submission management, GDPR/privacy support, multilingual UI, and automated test coverage.

AI Assistant Integration for Moodle (2025-2026)

Client: *Generative SRL, Romania (end client: ViC / eeirh.org)*

Designed and developed an AI assistant solution integrated into Moodle for the educational platform **vic.eeirh.org**, delivering both a backend local plugin (local_vicai) and a frontend chat block (block_vicai). Implemented a full Retrieval-Augmented Generation (RAG) pipeline with PDF knowledge-base ingestion, text chunking and vectorization, OpenAI API integration, semantic search, query rewriting for conversational context, multilingual support, conversation history, maintenance-mode access control, and responsive chat interfaces in both sidebar and full-page modes.