

# Wael Abdulsalam Hamwi

Senior Full Stack Web  
AI Developer

## CONTACT INFORMATION

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**Location:** Egypt, Cairo (Originally from Syria)

## SUMMARY

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Senior technology leader with extensive experience in Full Stack Web Development and AI integration. Specializing in AI-driven web solutions, with expertise in both back-end and front-end development, networking, and image processing. Experienced in software development, project leadership, and solution architecture. Skilled in navigating complex challenges and driving innovative initiatives. Committed to leveraging technology for progress and adept at propelling organizations toward strategic objectives.

## WORK EXPERIENCE

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### 1. Freelance Web Developer (2022 - 2024)

- Developed custom web solutions for various clients, specializing in both back-end and front-end development, AI integration, and solution architecture.
- Built a custom WordPress theme for Emerald Company, optimizing user experience and enhancing brand identity.
- Automated account opening processes for Merak Company by developing a WordPress automation system, streamlining operations and improving efficiency.
- Designed and implemented a sales management system for a local company in Egypt, enabling efficient tracking of orders and products.
- Created an E-commerce platform for a local company in Egypt, providing a seamless online shopping experience for customers and robust management tools for the client.

### 2. Academic Work Experience (2013 - 2021)

- Developed a surveillance system for malls during university studies, utilizing image processing techniques to track products and prevent theft.
- Built a COVID-19 detection system using AI models during master's studies, contributing to public health efforts during the pandemic. The system utilized deep learning algorithms to analyze medical imaging data and identify potential cases with high accuracy. Collaborated with healthcare professionals to validate the system's effectiveness, resulting in its adoption in several healthcare facilities.
- Implemented Data Mining algorithms to detect the possibility of diseases based on factors such as blood pressure, temperature, and other physiological indicators. Collaborated with medical experts to validate the algorithm's accuracy and applicability in healthcare settings.
- Completed a mini project in web engineering, including the design of Unified Modeling Language

diagrams, navigation diagrams, and conceptual diagrams for a National Geographic website. This project focused on creating a user-friendly interface and efficient navigation system for accessing diverse content.

- Led the development of an E-petrol Application during Android system studies, providing users with real-time information on fuel prices. The application, integrated with a website, enabled users to input the amount of fuel they purchase and provided details of liters filled and the customized amount remaining in their account, accessible both on Android devices and through a web interface.

## Achievements

- Increased user engagement by 20% and reduced bounce rates by 15% for the Emerald Company website through the development of a custom WordPress theme.
- Achieved a 30% reduction in administrative overhead for Merak Company through the automation of account opening processes.
- Achieved more than 90% accuracy rate in COVID-19 detection through deep learning algorithms developed during academic studies.
- Mentored junior developers, guiding them through complex projects and helping them enhance their technical skills.

## PROJECTS

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### E-commerce Website

- Developed a fully functional e-commerce website using Laravel and React with native CSS for User Interface responsiveness. The project's code is available on GitHub [\[Link\]](#), and you can access a demo [\[here\]](#).

### Sales Management System

- Developed a robust sales management system using the Laravel PHP framework and Ajax technologies, facilitating seamless sales operations including inventory management and order processing. The project's code is available on GitHub [\[Link\]](#), and you can access a demo [\[here\]](#).

### Automation

- Integrated electronic signature functionality using DocuSign and workflow automation with Zapier in a WordPress project for Merak Capital. This integration enabled form filling and routing for validation. You can find the live project [here](#). Additionally, you can access the project demo and related files [\[here\]](#).

### Custom WordPress Theme Development

- Developed a custom WordPress theme for Emerald Company, optimizing user experience and enhancing brand identity. Press [here](#) to view the live project.

### Deep Learning System for COVID-19 Detection

- Led the development and integration of VGG and Dense transfer-learning systems for COVID-19 detection using Python, Keras, and TensorFlow.

## Image Processing Surveillance System

- Implemented an image processing surveillance system in MATLAB to prevent product theft. Employed algorithms for detection and tracking, triggering alerts upon discrepancies.

## Newspaper Platform

- Created a newspaper platform initially in PHP using Model-View-Controller architecture, Later upgraded to Laravel framework for improved performance and scalability.

## Disease Detection System

- Created a disease detection system using the ID3 algorithm, integrated with a web interface for user input and analysis.

[More projects on GitHub](#)

## EDUCATION

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### Bachelor of Communication Engineering

Faculty of Electrical and Electronic Engineering, Aleppo University, Damascus, Syria 2013 – 2018  
*Relevant coursework:*  
Digital Signal Processing, Communication Systems, Network Engineering

### Master in Web Technology

Syrian Virtual University, Damascus, Syria 2018 – 2022  
"Advancements in Web Development: A Comprehensive Study of Modern Technologies"  
Conducted research on emerging web technologies and best practices.  
*Relevant coursework:*  
Advanced Web Development, Web Security, Database Management Systems

## PUBLICATIONS

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- **Recognition for Contributions to the Journal Review Process**  
*Journal:* Informatics in Medicine Unlocked  
*Date:* July 2022
- **Development and Integration of VGG and Dense Transfer-Learning Systems for COVID-19 Detection**  
*Journal:* Informatics in Medicine Unlocked  
*Date:* May 2022  
*DOI:* 10.1016/j.imu.2022.101004  
*Link:* [Click here](#)  
*Citations:* 11  
*License:* CC BY-NC-ND 4.0
- **Building a Unified Neural Network of Deep Convolutional Models to Classify COVID-19 Patients by Spatial Processing of the Features in Radiographs and Tomography Images**  
*Journal:* Research Journal of Aleppo University  
*Date:* 13 October 2022

## SKILLS

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### Programming Languages

- C, C++, PHP, PHP Object-Oriented Programming, Java, Java Object-Oriented Programming, C Sharp, Python, SQL

### Web Development

- HTML5, CSS, JavaScript, jQuery, Bootstrap, XML, JSON, Sass, AJAX

### Frameworks

- React.js, Laravel, Flask

### Libraries

- Keras, TensorFlow, Matplotlib, Pandas, NumPy

### Integration Systems

- DocuSign, Zapier, stripe payment gateway

### Content Management Systems (CMS)

- WordPress (Elementor, FormCraft, Phlox)

### Artificial Intelligence

- Artificial Intelligence, Neural Networks, Deep Learning, Image Processing, Data Mining

### Version Control Systems

- Git (GitHub, Bitbucket)

### Routine server monitoring and maintenance

- Conducted routine server monitoring, updates, and performance checks.

### Additional Skills

- Object-Oriented Programming, Inheritance, Polymorphism, Clean Code Principles, Problem Solving, Security Awareness, Data Structures, Software Development Life Cycle, Project Management, Quality Assurance Testing, Business Knowledge, Object-Relational Mapping Relationships Management, Database Design, Algorithms, Networking, Google Colab, Cloud Systems

## CERTIFICATES

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- Web Design Certificate from New Horizon Institute, and Web Development Course at CLS Learning Solutions in Cairo
- English Language Certificates from New Horizon Institute  
Advanced Level English Certificates, International English Language Testing System (IELTS), and Test of English as a Foreign Language (TOEFL) Certificates from the Higher Consulting Institute of Aleppo University