

# Andrei Demian

fluent in code

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## SUMMARY

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Full stack engineer with 14+ years of experience, passionate about writing clear, maintainable code. Skilled in architecting robust APIs, handling large databases, and enhancing user experiences, I focus on balancing business needs with creating minimal technical debt, delivering efficient workflows and scalable, well-documented designs.

I'm proficient in **Javascript, React, Node.js, PHP, and MySQL**, with strong experience in building scalable applications. I've also worked with various other technologies, including **Typescript, Flow, Koa, Express, WordPress, SASS, MongoDB, Redis, Docker, Elixir, AWS, Git, SVN** and a range tools like **JIRA, CircleCI, TeamCity, Grafana, Figma, StoryBook** and **Logstash**.

## WORK EXPERIENCE

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### Automattic

Senior Full Stack Engineer

March 2017 – October 2024

7 years and 8 months

*Automattic is a fully remote company with approximately 1,700 employees powering well-known products like **WordPress.com, Tumblr, Day One, Pocket Casts, Gravatar**, and more.*

#### Responsibilities & Key Achievements

- Steered initiatives on **Automattic's special projects** team to drive revenue diversification, create new products, and revitalize legacy applications. Served as a **technical advisor, mentoring junior developers**, improving onboarding, and enhancing workflows. **Established CI/CD**, static code analysis, and monitoring with Grafana, ELK stack, and StatsD for real-time tracking, enabling efficient troubleshooting and high code quality.
- Led a foundational redesign of **Gravatar.com's API and data architecture**, streamlining data structures and successfully migrating approximately **80 million profiles** and 40 million third-party accounts to a new **PHP** based data model supported by **MySQL**. Additionally, transitioned over **200 million** records to SHA-256 hashing to enhance security and future-proof the platform. Contributed to a complete frontend overhaul, migrating to **React** to elevate both the user and developer experience.
- Revamped the **wordpress.com/forums'** design, which supports nearly **1 million posts**, while also upgrading to the latest bbPress version to improve security and performance. Developed a **seen posts** tracking system that manages around **3 million daily** entries for the **wordpress.com** platform.
- Architected **wordpress.com/p2** with **React** mini-apps and dynamic **Gutenberg** blocks to enable interactive content and integrate **GitHub** and **Slack** data. Built as a **WordPress plugin**, P2 exposes an interface for asynchronous communication, designed to replace email chains and improve collaboration for distributed teams. These enhancements transformed it into a widely adopted tool for structured communication, used by Automattic employees and external customers.
- Designed and implemented a scalable, **multi-tenant** infrastructure for **happy.tools**, a scheduling tool that ensures adequate customer support coverage. Built in **React** with an API powered by **PHP** and **MySQL**, the application was created on an **event sourcing** architecture utilizing **CQRS**, enhancing data retrieval for easier auditing and improved historical accuracy. Developed and launched a **Zendesk integration** for Happy Tools.
- Reengineered Happy Chat, an **internal chat system** for customer support, to improve real-time messaging and scalability. Enhanced the existing backend on **Node.js, Socket.io, and Redis**, then transitioned to **Elixir** for high availability and fault tolerance. Migrated the frontend to **React**, ensuring seamless support for Automattic's global user base.

### OPSWAT

Full Stack Engineer

March 2015 – March 2017

2 years

*OPSWAT is a cybersecurity company based in **Tampa, FL**. with additional offices in **Timisoara, Romania** and more than **500** employees dedicated to protecting **critical infrastructure** via advanced **malware prevention** and secure data transfer solutions.*

#### Responsibilities & Key Achievements

- Led the development of a robust **REST API**, using **Koa** as the framework along with **Node** and **MongoDB** powering **metadefender.com** with scalable, high-performance support for internal and external applications.
- Engineered solutions for a **sharded MongoDB instance** managing over **2 billion file hashes**, optimizing data retrieval and processing for large-scale client demands with **AWS services** (S3, SNS, SQS).
- Transitioned a legacy web application from **CodeIgniter** and **jQuery** to **Drupal** and **Angular**, enabling the team to easily make updates to the site's marketing content. This shift improved **maintainability** and functionality for OPSWAT's security-focused products while building my skills in **modernizing** complex, outdated codebases.

## [e-spres-oh] Full Stack Engineer

February 2013 – March 2015  
2 years and 1 month

*e-spres-oh* is a software company based in **Timișoara, Romania** with additional offices in **Washington, DC**. Known for their user-first approach and commitment to **innovation**, they specialize in **complex digital projects** across various industries.

### Responsibilities & Key Achievements

- Contributed to the development of an **e-learning platform**, starting with a UI module in **Symfony 2** and later advancing to build the core **REST API** using **Lithium PHP** and **MySQL**. This API became a **foundational component**, allowing the team to efficiently develop additional modules and mobile applications that extended the platform's functionality.
- Developed internal applications for an **airline company** using **AngularJS** and **Express**, gaining essential experience in collaborating with a global team across time zones in a **highly regulated** industry.
- Participated in an internal **cross-training program** to quickly adapt to new projects and technologies, broadening my skills across various platforms. Attended **national conferences** and numerous **hackathons**, further **expanding my knowledge** and staying engaged with cutting-edge developments in the field.

## New Haircut Full Stack Developer

June 2010 – February 2013  
2 years and 9 months

*New Haircut* was a product development studio based in **Timișoara, Romania** with an additional office in **Freehold, NJ**. They utilize strategies successfully applied for clients such as **Google, Amazon, Home Depot, Nike, Disney, Coca-cola** and many more.

### Responsibilities & Key Achievements

- Successfully **led backend development** of an internal **e-commerce platform** built to be versatile, enabling the company to **reuse it** across various projects. Managed third-party integrations and implemented performance improvements to ensure the platform could support diverse applications.
- Built and maintained scalable e-commerce solutions with **CodeIgniter**, gaining practical experience and an understanding of **MVC** architecture while applying **Gitflow** for organized version control and code management.
- Developed skills with **third-party APIs**, learning integration and troubleshooting, and began building custom **RESTful APIs** enable communication and functionality across systems.

## HONORS

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**Juror** for the **HackTM** regional hackathon organized by **BanatIT** May 2018 – Present  
*Since 2018, I've had the privilege of serving as a **jury member** for one of the largest regional hackathons, welcoming over **500 participants** with each edition.*

**Winner** of the Fintech 2.0 **national** hackathon organized by **Bank of Cyprus** October 2018  
**3rd place** at the **international** hackathon organized by **Koding.com** December 2014  
**Winner** of the Startup Weekend **local** hackathon organized by **StartupHub** April 2014  
**Finalist** in the Cloud Developer Challenge **international** competition organized by **Google** January 2014

## EDUCATION

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**Bachelor's Degree** in **Computer Science** from Politehnica University of Timișoara October 2008 – July 2012

## SKILLS

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System Design • Software Architecture • API Design • Database Design • Application Security • Performance Optimization  
Full Stack Development • LLM Literacy • Developer Tooling • Version Control • UX Intuition • Balanced Testing Approach

## REFERENCES

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Professional recommendations are available on my LinkedIn profile at <https://linkedin.com/in/undemian>  
Phone references can be provided upon request.