

Joseph Kerkhof

☎ +1 920 376 1248 | ✉ joseph@kerkhof.dev | 🌐 GitHub | 📁 Portfolio | 📍 New London, WI

SUMMARY

Senior Backend Engineer with 6+ years specializing in PHP/Laravel, building scalable systems and payment integrations. Proven track record delivering complex products from ground-up (GM product, NCAA-compliant integrated payments) while maintaining 90%+ test coverage and sub-second API response times. Deep expertise in reducing technical debt through modern architectural patterns (Domain Driven Design, CQRS, Event Sourcing) and establishing robust CI/CD pipelines. Strong foundation in backend fundamentals (concurrency, databases, APIs, system design) with active focus on expanding to Go, Ruby, and Python ecosystems.

TECHNICAL SKILLS

Backend: PHP, Laravel, MySQL, Redis, RESTful APIs, Asynchronous Processing, Event-Driven Architecture

Frontend: React, TypeScript, JavaScript, Jest

Architecture: Domain Driven Design (DDD), CQRS, Event Sourcing, Action Pattern, SOLID Principles, Microservices

Infrastructure & DevOps: AWS, Linux, Docker, CI/CD Pipelines, Horizontal Scaling, Load Testing

Testing & Quality: PHPUnit, Pest, TDD, 90%+ Code Coverage, Integration Testing

Observability: Structured Logging, Distributed Tracing, StatsD Metrics

Methodologies: Agile/Scrum, Code Reviews, Technical Documentation

Currently Learning: Go, Ruby, Python

EDUCATION

University of Wisconsin — Oshkosh

Oshkosh, WI

M.Sc. in Data Science (Part-time); GPA: 4.00/4.00

Sept 2017 – Jun 2021

B.Sc. in Computer Science

Sept 2011 – Jun 2016

WORK EXPERIENCE

Teamworks

Remote, USA

Senior Software Engineer

May 2024 – Sept 2025

Tech Stack: Laravel, PHP, MySQL, Redis, AWS, CI/CD

- Architected and delivered GM budget management product from concept to production in 3 months, processing athlete compensation across multiple universities with 90% test coverage and daily production deployments via automated CI/CD pipelines.
- Delivered integrated payment systems within 8 months meeting the aggressive NCAA's July 2025 regulatory deadline, implementing modern architectural patterns (Domain Driven Design, CQRS, Action Pattern) while strictly adhering to SOLID principles.
- Engineered a high-performance RESTful API achieving sub-second response times through optimized database queries and asynchronous processing with Redis queues, implementing comprehensive observability via structured logging, distributed tracing, and StatsD metrics.
- Collaborated with product managers and designers on cross-functional team to translate complex business requirements into technical specifications and maintainable code.

Prodege

Remote, USA

PHP Developer

Mar 2023 – May 2024

Tech Stack: PHP, Laravel, MySQL, Google Ads SDK, Cron Jobs

- Built automated Google Ads campaign management system reducing manual launch time from 8 hours to 30 minutes (90% reduction), while preventing \$20K-\$30K monthly ad spend wastage through real-time budget optimization and alerting.
- Refactored and upgraded PHP cron jobs and their dependencies leveraging modern Laravel and external APIs resulting in improved reliability to critical business functions.
- Optimized MySQL queries on 200GB+ tables, reducing query execution time from 45 seconds to under 3 seconds and improving dashboard load times by 85% through table redesign and proper indexing strategies.

Clockwork

Senior Software Engineer

Minneapolis, MN

Mar 2019 – Mar 2023

Tech Stack: React, TypeScript, PHP, MySQL, Jest, Load Testing Tools

- Led development and deployment of 3 customer-facing web products serving 50K+ users as Scrum Master, managing sprint planning and delivery for 5-person cross-functional team using React, TypeScript, and comprehensive Jest unit tests.
- Load-tested high-traffic website processing 100K+ daily requests to identify application and infrastructure bottlenecks, implementing horizontal scaling solutions that improved response times by 60% and eliminated timeout errors.
- Maintained and optimized high-volume promotion engine powering 350K+ customer accounts with thousands of daily transactions, ensuring 99.9% uptime through proactive monitoring and performance tuning using PHP and MySQL.

PROJECTS

Omnibus Config File Validator | [GitLab](#)

Tech Stack: Golang, Cobra

- A tool for validating GitLab Omnibus (gitlab.rb) configuration files. It checks for common misconfigurations, security issues, and best practices in a simple-to-use CLI tool. Testing, linting, building, and validation are all done in GitLab pipelines.

GitHub RSS | [GitHub](#)

Tech Stack: PHP, Laravel, Inertia, Vue.js

- RSS feed generator for GitHub repository activity monitoring built with PHP/Laravel, demonstrating clean architecture, dependency injection, comprehensive testing, RESTful APIs with limit-offset and cursor pagination, and modern software engineering practices.

Path-finding AI | [GitHub](#)

Tech Stack: Java

- Java-based genetic algorithm implementation demonstrating machine learning fundamentals, where autonomous agents evolve navigation strategies to reach targets without explicit instructions.