

Pedro Lopes

Experienced software engineer with a focus on building robust & scalable digital experiences

hello@pedroclopes.com
(281) 965-1214
github.com/gitpcl
pedroclopes.com

Relevant Experience

Senior Full Stack Developer · **Triple Helix** · April 2021 - Present

- Build, maintain, and ship production-grade enterprise applications for manufacturing, aerospace, and healthcare clients primarily using Laravel 8-12+, Vue 3, MySQL, and Tailwind CSS
- Engineer and optimize complex database architectures for high-volume ERP systems using MySQL, MariaDB, and Eloquent ORM
- Integrate legacy ERP databases (Macola, MAX, Made2Manage) with modern Laravel applications using custom API bridges, ETL processes, and real-time data synchronization pipelines to ensure seamless dual-system operations
- Architect and implement AI-powered forecasting platform utilizing Self-Organizing Maps (SOM) algorithms, Python machine learning libraries, and Laravel backend services to analyze historical sales data and generate actionable forecasting recommendations for strategic business planning
- Collaborate with product managers and C-level stakeholders to transform business requirements into scalable technical solutions delivered at 2-week sprint cadences

Software Engineer · **Freelance** · August 2020 - April 2021

- Developed and shipped custom websites and mobile applications for 20+ small businesses and enterprise clients including Ecopetrol USA (Colombia's largest oil company) using React, React Native, Laravel, Wordpress and MySQL
- Designed and implemented scalable server infrastructure on Linode, Digital Ocean and AWS using Docker, Nginx, and automated deployment pipelines to ensure reliable hosting solutions for diverse client requirements
- Collaborated directly with business owners, executives, and technical teams to gather requirements, create technical specifications, and deliver fully functional applications that improved operational efficiency and customer engagement

Software Engineer · **Parksonic** · August 2016 - August 2020

- Developed and maintained smart parking guidance applications using React, JavaScript, MySQL, and RESTful APIs to process real-time sensor data from 1000+ parking spaces across multiple facilities
- Built and shipped mobile-responsive dashboards and wayfinding interfaces using React, Tailwind CSS, and Google Maps API integration to improve parking space utilization by 40% and reduce search time
- Collaborated with hardware engineers and facility management teams to design intuitive user experiences for sensor data visualization, automated space detection, and dynamic pricing algorithms

Skills

Programming Languages

JavaScript, PHP, TypeScript, Python, SQL, Bash, HTML, CSS, GraphQL

Libraries & Frameworks

Laravel (6-12+), Vue 3, Node.js, Express.js, Symfony, Tailwind CSS, Alpine.js, Livewire, Pinia, Ionic, React Native, Expo

Tools & Platforms

Git, GitHub, GitLab, Gitea, Jenkins, GitHub Actions, AWS S3, Digital Ocean, Heroku, Linode, Laravel Forge, Docker, Nginx, Apache2, Figma, Photoshop, Illustrator

Selected Projects

AI-Powered ERP Platform

Automated scheduling of weekly production orders for shop floor operations based on historical sales data analysis

CRM With AI Analytics

Intelligent summarization and reporting of sales representative activities and performance metrics

Education

Bachelor of Business Administration in Finance

Global Energy Management
University of Houston

Full-Stack Development Certification

Rocketseat - Launchbase Bootcamp

Interests

Machine Learning & Deep Learning, Natural Language Processing (NLP), Generative AI Applications, AI for Automation & Productivity