

Sandra Chaparro, BSCS Software Engineer

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WORK EXPERIENCE

Software Engineer

April 2025- January 2026

Mayan Technologies

Tech: NodeJS, Express, ReactJS, NextJS, MySQL, MongoDB, CronJobs, APIs, ChakraUI, Jira, CI/CD workflows.

- Developed full-stack features for a specialty healthcare EHR supporting allied health providers, building secure payment processing, appointment scheduling, and product sales modules that served 15+ practitioners.
- Built a comprehensive refund management feature integrating Stripe API, handling partial and full refunds, transaction tracking, and automated reconciliation, eliminating manual credit reconciliation processes.
- Diagnosed and resolved critical performance bottlenecks causing slow application response times, optimizing inefficient MySQL queries that reduced API response time by 70% and improved user experience for patients and practitioners 3.5s to 207ms.
- Strengthened API security by implementing authentication and authorization middleware across endpoints, preventing unauthorized access to sensitive patient information.
- Designed and implemented a real time KPI dashboard.. Enabling management to identify trends, prioritize debt recovery, and reallocate resources.
- Improved cronjobs to synchronize clinical correspondence with Docman Connect, ensuring healthcare providers had real-time access to patient documents and maintaining data consistency across the EHR system, validating improvements through Kafka events.
- Maintained CI/CD workflows with Git-based version control and implemented security best practices within 3-tier architecture.
- Integrated DocuSign eSignature API into external application using C# and JWT authentication, enabling automated document signing workflows and reducing manual signature processing time.
- Monitored and supported remote access workstations by troubleshooting system issues, installing applications, and configuring software to support team members accessing shared resources.
- Develop custom ERP client solutions, including BAQ reports and tailored functionality for a range of clients, including ITAR-regulated organizations, to address specific business needs and improve operational insights.

Web Developer

July 2024 - April 2025

SWITECH

Tech: ReachJS, Bootstrap, Astro, Figma, Vercel.

- Addressed clients' need for optimized web presence by designing and deploying responsive websites improving user engagement and enhanced cross-device usability.
- Bridged business and technical requirements by partnering directly with business owners to translate needs into high-performance web solutions, ensuring alignment with user expectations.
- Eliminated deployment risks and manual errors by implementing automated CI/CD pipelines with Vercel and Git version control practices, achieving 100% zero-downtime deployments and streamlining release workflows.

Computer Science Tutor

Dec 2022 - July 2024

Superprof

Tech: Java, C++, Javascript.

- Provided individualized instruction to 10+ students in Java, JavaScript, and C++, emphasizing core programming principles through hands-on coding exercises and collaborative pair programming sessions.
- Designed and implemented a tailored curriculum focused on Software Development Life Cycle (SDLC) best practices, resulting in a 35% improvement in student code quality metrics.

Software Engineer Co-Op

May 2022 - Oct 2022

Motorola Solutions, Inc,

Tech: ReactJS, OAuth 2.0, Jira API, Node.js, Express, Azure Pipelines, fundamentals of Docker and Kubernetes.

- Unified project data from multiple sites by developing a centralized React dashboard with OAuth 2.0 authentication integrating Jira API, providing real-time project visibility.
- Improved deployment efficiency by optimizing AzurePaaS CI/CD pipelines with YAML configurations, reducing deployment time and streamlining the release process.
- Solved slow data retrieval and poor user experience by building responsive Bootstrap front-end interfaces, which improved page load performance and enhanced data interactivity.

- Optimized Docker image lifecycle management by systematically removing stale images, improving build efficiency and reducing infrastructure overhead.
- Completed FedRAMP compliance training covering security controls, authorization requirements, and industry best practices for services handling federal government data.

PROJECTS

Full Stack Developer

February - March 2025

DSD-COHORT | Dental Practice Management System (EHR)

Tech: NextJS, TypeScript, Tailwind CSS, ExpressJS, JWT, Linux, Figma.

- Addressed scalability limitations by architecting a multi-tenant EHR platform using Next.js and Express.js, enabling seamless support for multiple dental practices from a single codebase.
- Solved fragmented patient data management by developing RESTful APIs with Express.js for appointment scheduling, treatment tracking, payment processing, and product sales, centralizing clinical and administrative workflows for dental practitioners.
- Enhanced security by implementing JWT-based authentication and authorization in Express.js, protecting sensitive patient health information and ensuring role-based access control across the platform.
- Improved user experience by designing responsive wireframes in Figma and implementing a modern front-end interface using TypeScript and Tailwind CSS, reducing appointment booking time and streamlining administrative tasks for dental staff.

Full Stack Developer

March - April 2024

DSD-COHORT | Grocery Inventory Management System

Tech: ReactJS, Javascript, Tailwind CSS, NodeJS, PostmanAPI, Figma.

- Solved the daily challenge of meal planning and food waste by developing a full-stack React application that suggests 100+ recipes based on available ingredients and automatically generates grocery lists for meal prep, reducing decision fatigue and shopping time.
- Developed seamless recipe discovery by integrating a third-party recipe API to provide preparation instructions and nutritional data, designing a MongoDB backend to efficiently store API responses and custom user preferences.
- Addressed meal planning inefficiency by building an intelligent ingredient-matching algorithm that recommends recipes from available pantry items, helping users reduce food waste and streamline weekly meal preparation.
- Collaborated across the full software development lifecycle using Kanban methodology, delivering iterative features from requirement analysis through deployment, ensuring timely visibility of milestones and solution implementation.

EDUCATION

Fort Hays State University

June 2019 - Completed Dec 2022

Bachelor Degree of Science in Computer Science and Information Systems Engineering.

- Delivered Full Stack projects using Java, JavaScript, PHP, C++ with 100% on-time completion rate and deployed on Heroku and Netlify.

SKILLS

● JavaScript	● MySQL	● Linux
● TypeScript	(Sequelize)	● Git/GitHub
● SQL	● MongoDB	● APIs
● Node.js/Express	(Mongoose)	● OAuth 2.0
● React	● CI/CD	● JWT

CERTIFICATIONS

- Cloud Foundations Epicor
 - Claude 101
- Claude Code
 - AI Fluency