

David Mejia

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SKILLS

React, Redux, Python, JavaScript, TypeScript, HTML & HTML5, CSS & CSS3, SQL, PSQL, Flask, Docker, GraphQL, Hydrogen, Git, NodeJs, Sequelize, REST API's, Alembic, D3.js, Django, React Native, Tensorflow 2.0, GPT integration, Pandas, MongoDB, Heroku, AWS, Figma, Tailwind, SASS & SCSS, Stable Diffusion, Gen AI, Pinecone DB, LangChain, StackAI, CrewAI, Flowise, Chrome Extension, LLM Integration, Astro.JS, Matplotlib

EXPERIENCE

Lead Software Engineer and AI integration

Omni Nexus LLC. Sep 2023 - Present

- Implemented **Retrieval Augmented Generation systems** with LLM's, **PineconeDB** and **LangChain**.
- Administered projects for **business automation tasks** using code and no-code solutions.
- Managed databases with custom knowledge bases on Upstash, PineconeDB, PostgreSQL and LangSmith.
- Managed AWS Admin functionalities like **PEM keys**, **EC2** and **S3** for storage.
- Created **Next.js** based apps with Node.js backends for integration of LangChain and **REST API's**.
- Styled apps with CSS, Tailwind, AntDesign and SASS.

Shopify Hydrogen/React Fullstack Engineer

Cattleya The Label (CTL) . Dec 2023 - June 2024 (Contract)

- **Built custom headless eCommerce storefronts** using **Shopify, React, Remix** and **Hydrogen - H2**.
- Integration of data fetching with **Remix Loader** functions for state management, SSR and client side rendering.
- **Implemented GraphQL API endpoints** for Shopify data fetching.
- **Deployed testing and production ready storefronts**, managing administrative tasks via the **Shopify Admin Panel**.
- **Developed responsive, mobile-friendly UI/UX**, ensuring cross-device compatibility using **HTML5** for markup, **CSS3 & SASS** and **media queries**.
- Created reusable **extendable components** in **React**, with creation of **React Hooks**.

Full-Stack Lead Software Engineer Leading Flagship App Development.

ArbiLex, a Data-driven Litigation Finance solutions company. Jun 2022 - Aug 2023

- **Scoped and built** flagship product with cross functional teams in design, engineering and data science.
- Integrated use of **Redux**, thunks and reducers for proper state management in **React SPAs** and **REST API** calls.
- Administered **Heroku** app instances for testing, staging & production environments with **TypeScript Webpack**.
- Leveraged the use of **CircleCI** for CI/CD deployment testing on staging and production environments.
- Managed backend services on **AWS** hosted Django based applications with **EC2's**, **S3 Buckets**, creating **IAM Users** and **PEM keys**.
- Created and managed **PostgreSQL** database tables and relationships with **Django's ORM**.
- Handle full lifecycle of **REST** and **GraphQL** API architectures with Django Rest Framework and Node.js. Overseeing API security, integrity and scalability.
- Generated client side data visualizations using **D3.js**.
- Led team of engineers, delegating tasks to ensure efficient workflow and proper goals met deadlines.
- Developed take-home exercises and projects for potential hires; interviewed potential hires.
- Maintained proper documentation for frontends and backends. Onboarded new engineers to the codebase.
- Collaborated with design teams to implement responsive pixel perfect UX/UI best practices using **Figma**.
- Utilized SASS stylesheets, **BootstrapUI**, **MaterialUI** and **AntDesign** from designer specs and files.
- Worked closely with Data Science & Analysis teams for handling of data hand-off.

Full-Stack Software Engineer

Orlando, FI Soccer Academy March 2021 - June 2022 Freelance

- Re-designed outdated Wix site in **Figma**.
- Implemented design into code transferring the WIX site to a Heroku hosted full stack **React** and **Flask** SPA.
- Created contract forms and automations with **SendGrid** to ensure communication with clients.
- Setup **Stripe** payments to offer a flawless payment service inside the app.
- Implemented custom **Business Process Automations (BPA)** for invoicing, sending and receiving signed

contracts, lead generation messaging and notifications.

PROJECTS

Oculus (React, Nodejs, GPT-4, JavaScript, RESTful API's, SCSS, Flowise - Langchain, Langsmith, OpenAI Assistant)

A React based Chrome Extension for an in-browser AI powered Assistant

- **Dynamic UI Components:** Built responsive and interactive **Popup** and **SidePanel** interfaces using **React**.
- **Content Script Automation:** Integrated **MutationObserver** to dynamically track and inject React for (ChatGPT, Deepseek).
- **Real-Time Communication:** Enabled **message passing** between **content scripts** and the **background service worker**.
- **Webpack Optimization:** Configured **Webpack** for efficient bundling, resource management, and production-ready builds.
- **UI/UX Design:** Delivered polished, cross-device compatible designs using **custom CSS** and responsive layout techniques.
- **Background Service Automation:** Managed script injection, context menu creation, and side panel control via the **background.js** service worker.
- **Secure and Scalable Architecture:** Followed **Chrome Manifest V3** guidelines, ensuring enhanced security and optimized script execution.

Pandora PDF (Nextjs, Nodejs, GPT-4, TypeScript, JavaScript, RESTful API's, AWS, Tailwind, Langchain)

A PDF reading app that allows users to upload and query within PDF documents leveraging GPT and Pinecone

- Implemented OpenAI's **GPT-4 API** for **Retrieval Augmented Generation (RAG)** within PDF queries.
- Enabled long term AI memory with **PineconeDB**.
- Added **Langchain** framework for powerful document parsing util functions.
- Utilized **Nextjs**, for fast and optimized web interactions.
- Hosted storage and security of data access in AWS setting up functions and rulesets for databases.

Nomadika (Flask, Python, React, JavaScript, RESTful API's, Docker)

A travel companion app with a rich visual UI that provides venue information of any city and interaction with other users

- Implemented Foursquare's **Places API** to accurately receive data from any city.
- Administered **RESTful API's** leveraging async JavaScript using **React** and **Redux** store and state, allowing full **CRUD** functionality on posts, comments, and bucket list destinations.
- Incorporated **Python** and **Flask** backend to manage calls using **SQLAlchemy** ORM for database querying.
- Used **Docker** containers with Dockerfiles and images to facilitate the use of the web app in virtual environments and deployment to **Heroku** with **GitHub Actions**.
- Handled full responsiveness of frontend with custom media queries and utilizing flexbox, viewport, and built in and custom **React Hooks**.

Travlr (React, Redux, JavaScript, Express)

React/Redux and Express flickr based app that allow users full CRUD on photos and comments.

- Ensured the privacy of users by implementing **BCrypt Hashing** functions in the backend and auth routes in the frontend.
- Properly managed **React** and **Redux** store by dispatching thunks and **API** calls to ensure seamless data rendering in the front end for full **CRUD** functionality..
- Instituted the use of **Express.js** and **Node.js** to accurately handle **API** calls and manage the manipulation of data in a **PostgreSQL** database with the **Sequelize** ORM .

EDUCATION

Full Stack Software - **App Academy** | Feb 2021

- Rigorous 1000-hour software development course with <3% acceptance rate
- Topics include: TDD, scalability, algorithms, OOP, Back End, Front End, Full Stack, coding style, REST, security, single-page apps, pair programming, and web development best practices.

BS Biology, Pre-Med: **University of Massachusetts Boston** | 2013 - 2018