Neil Hendren

Versatile Fullstack Software Engineer | Chemical/Bio Engineer | Ruby | JavaScript
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Summary

Software Engineer with over a decade of experience, blending expertise in web development, database management, and academic research to pioneer modern engineering solutions. Leveraging skills in Ruby on Rails, PostgreSQL, JavaScript, and a suite of other programming languages, I am committed to driving future advancements in technology through continuous learning and application of cutting-edge tech.

Professional Experience

Front-End Software Engineer @ University of Colorado Boulder, Boulder, CO.
03/2018 - Present
- Designed 500+ page educational website in collaboration with chemical engineering research professor
- Authored scientific simulations and virtual labs, used by thousands of students worldwide

Select Projects

Catalytic Reactor Virtual Laboratory | Deployed Application | Private Repository | Publication
Tech: Express.js | PostgreSQL | Heroku
Graduate-level laboratory assignment to characterize chemical reaction kinetics by nonlinear regression
- Utilized Express.js and PostgreSQL to manage credentials and obfuscate equations used in the assignment

World Geography Quiz | Deployed Application | GitHub Repository
Tech: Ruby | Rails | RSpec | Capybara | PostgreSQL | REST API
Academic project that dynamically generates world geography quizzes from a data bank and records high scores
- Deployed a Rails application using OAuth2 for credentials and REST for communication between FE and BE

LearnChemE Front-End Simulations | Deployed Application | GitHub Repository
Tech: HTML5 | CSS | JavaScript | Bootstrap | Node.js | Webpack | Responsive Design
Collection of embeddable scientific simulations used in the instruction of engineering topics
- Authored more than 50 interactive simulations that accurately depict scientific processes

RuneFall | Deployed Application | GitHub Repository

Tech: React.js | React Router | Rails | PostgreSQL | Tailwind
A search engine for playing cards used in the game Runeterra
- Designed a responsive front-end and RESTful back-end using Rails

Technical Skills

Languages/frameworks: Ruby, Rails, ActiveRecord, JavaScript ES6, SQL, HTML5, CSS, React.js
Testing: Test Driven Development (TDD), RSpec, FactoryBot, Capybara, Orderly, WebMock, VCR, Cypress
Tools/Workflow: Git, GitHub, GitHub Pages, Heroku, Postman, REST APIs, Postico, NPM

Education

Accredited Certificate in Backend Engineering   08/2024
Turing School of Software and Design

B.S. Chemical and Biological Engineering   05/2017
University of Colorado, Boulder