Hsuan-chen Wan (Walter)

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SKILLS

React.js, Redux, MongoDB, Express.js, AngularJS, JavaScript, Ruby on Rails, jQuery, SQL, HTML5/CSS3, RSpec, Java, MATLAB, Git

WORK SAMPLES

Remember the Bacon   Live Site | Github

It is a place to store your to-do list and get things done! Inspired by Remember the Milk
(React.js, Redux, JavaScript, Ruby on Rails, PostgreSQL)

- Develop a single page application that utilize React.js/Redux to manage component states and reduce boilerplate code
- Build dynamic DOM components using JavaScript and CSS transition effects for responsive user-experience.
- Utilize Active Record library In Ruby to securely store and access user information on PostgreSQL

Snake VS Wall   Live Site | Github

This game is simple. Your goal is to eat stuff, getting bigger, breaking through tough walls, and survive!
(JavaScript, Ruby on Rails, HTML, CSS)

- Develop a vertical scrolling game in Javascript to manipulate HTML canvas and audio elements.
- Implement Rails backend api to keep track of highest scores on canvas
- Style canvas and HTML texts using CSS for a retro gaming experience

Automatic Initial Guess Generation in Mystic

Implementation of relevant dynamical systems tools near small body or planetary moons which enable automation of coast arc targeting and initial guess generation for Mystic (software used on NASA's Dawn mission)

- Develop a space trajectory simulation software with graphical user interface in Matlab/Matlab App Designer
- Build dynamic models and numerical computation tools for interplanetary trajectories

EXPERIENCE

Freelance Web Developer

CHAI & ASSOCIATES, LLC   July 2018 - Present
- Build a webapp from scratch for a newly developed Microsoft Excel add-in
- Provide web solutions and develop web sites and web applications based on specific business needs for promotions, presentations, customer service and online services

Software Developer - Google Supplier/Vendor

Research at Google   May 2018 - July 2018
- Develop a mobile web app for Google to gamify the collection of spatial language data in 20 days
- Design and document REST/HTTP APIs and implement JSON data formats. Write code to verify and package JSON data for the use of Google spatial language AI

Graduate Research Assistant

UCI Dynamics and Control Lab   June 2013 - Feb 2014
- Develop a space trajectory simulation software with graphical user interface in Matlab/Matlab App Designer
- Build Earth-Moon gravitational model and numerical computation tools for calculating interplanetary trajectories
- Write documentation for 20 different dynamic model classes and overall design philosophy

EDUCATION

App Academy   (Spring 2018)
Immersive software development course with focus on full stack web development

University California @ Irvine (Spring 2014) **GPA 3.93**
MS - Aerospace Engineering
Design & Analysis of spacecraft trajectories