Andy Hanson

Walnut Creek, CA – Will relocate to anywhere in USA
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Please prefer andy-hanson.me/resume

skill

proficient in	javascript (typescript, coffeescript, babel), c#, python
familiar with	java (scala), ruby, c++, c, glsl, html (jade), css (stylus)
tools	git, github, gulp, require.js, browserify, npm, bower
practices	testing, linting, documenting, small & pure funtions, refactoring, modularity

work

FaunaDB , San Francisco, CA *Associate Software Engineer*   Jun 2015-Jan 2016
Worked on clients for a new database for python, ruby, javascript, and c#.
Clients include REST client, error handling, (de)serialization, query language, and ORM, with tests and documentation. C#and javascript clients are asynchronous.
Worked on the website, a rails application built with FaunaDB. Work was mostly server-side.

IntentSoft , Bellevue, WA *Software Analyst and Developer*   Jul 2014-Mar 2015
Worked on a layout system. System takes as input a tree of content nodes (analogous to DOM nodes) and outputs a tree of graphical nodes (which have exact locations).
Rewrote part of system that queried content locations to be closer to purely functional. Wrote tests, discovered and fixed bugs, and participated in design and implementation of new features.

school

Rensselaer Polytechnic Institute , Troy, NY   GPA 3.94/4.0   2012-2014
Pending Bachelor of Science in Computer Science.

Digipen Institute of Technology , Redmond, WA   GPA 3.49/4.0   2011-2012
Made one game in ProjectFUN on a team of 3.
Responsible for program, sound, and some graphics.

code

mason   programming language   2014-
New language compiling to javascript. Several projects have been written in it already.

esast   javascript AST   2015-
Javascript AST, made type-safe with typescript. Renders to javascript code with source maps. Used by Mason.

dum   build system   2015-
Simple build system: translates files from e.g. jade to html, or coffeescript to javascript. No build script necessary.
Instead of specialized plugins, uses jstransformers. Completely asynchronous. Written in Mason.

painterly rendering   webgl rendering experiment   spring 2014
Team of 2. Real-time webgl, with HTML UI to modify renderer properties.
Renders a 3D particle system of brush stroke sprites which orient and curve along edges of objects and around centers of light.

logic online   online logic practice   spring 2014
Deduction language (shared by server and client) and exercises to learn it. Inference and equality rules are asserted or proved within the language. Exercises are stored as YAML files.

polo jeans   webgl 2D game engine   fall 2013
Team of 4. Lead meetings; worked on architecture, buld system, and media; wrote GameObject scripting, including multiple inheritance.

LEIA   natural language dependency grammar parser   fall 2013
Team of 6. A restaurant-recommending robot. Users write English sentences to ask for information about local food.
Wrote text to dependency grammar part of pipeline. Wrote onomasticon and lexicon as JSON data.

ghost control   control systems research video game   summer 2013
Worked for control systems researchers.
Web game that tracks user and saves/loads ghost data from server.

wahoo   scala 2D game engine   fall 2012
Features: dynamic lighting, loose quadtree collision detection, and type-based (via reflection), state-based GameObject scripting.

games   2009-2013
Web games and desktop-based games. One game in OpenGL, one in OGRE, both with PyGame.
Unfinished game written with Wahoo.