

Bradley Bossard

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Software engineer and **former Googler** with 10+ years experience and an emphasis on frontend web development.

Portfolio



Experience

Senior Software Engineer - **VenueNext** - 2016 - Present

VenueNext is a venture-funded startup building a platform for mobile and integrating all the services of a venue (ticketing, food & beverage ordering, loyalty, etc) in a single user experience. As a senior engineer on this remote team, my duties include

- Mobile development on both iOS and Android.
- Driving platform development, including API specification, UI design of platform features, and cross-platform feature implementation.

Lead Frontend Developer - **Aniden Interactive** - 2012-2016

Aniden is an interactive agency, where I was the lead developer on several frontend web projects utilizing Javascript, and Javascript frameworks and libraries.

- **Yahoo Doodle** - Image spriting / loading / animation. Python was used for image pre-processing, pure Javascript for loading and animating the sprite.
- **Race For The Stars** - Virtual reality game and web-based scoreboard. Technologies used included Unity / Javascript / Angular / Mongo / Express / Node JS.
- **Finish Drawing** - Web app for drawing and navigating drawing gallery. Developed for **Wacom Inkation** hackathon and placed 3rd. Built using Javascript / Angular/ Mongo / Node JS and Wacom WILL library.
- **History Of Baker Hughes** - Interactive tabletop timeline. Built using Javascript / jQuery / HTML5 canvas as a Chrome App.
- **HP Discover Mobility Experience** - Trade show piece. Built with Javascript / Angular as a Chrome App.
- **Cliphoarder** - Internal product, cloud-based clipboard tool. Technologies include Javascript / WinJS / Java Android / Dropbox and Skydrive APIs.
- **Android Kiosk Apps** - Over 20 native Android apps (Java) for HP/Dell devices for retail applications.
- **MPM** - Corporate project management webapp for visualizing project timelines. PHP / MySQL backend, Javascript / jQuery / jQuery UI frontend.
- **Digital Signage** - Multiple 120" touchwall kiosk projects. Technologies used included Flash / Javascript / Angular / HTML5 canvas.

Experience cont.

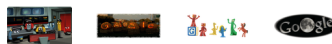
Software Engineer - Google - 2007-2012

While at Google, I have namely worked in digital mapping technologies, and have been involved in...

- **Google Earth 3D Buildings** - Automated creation of 3D buildings using LIDAR and aerial imagery. Written in C++.
- **Google Building Maker** - Image processing pipeline and server for serving aerial imagery. Written in C++.
- **Wapner** - Django-based internal tool for scoring 3D content. **Patent** issued for work on this project. Implemented with Django and Javascript.
- **Google Street View** - Javascript / Flash code for Google Street View and Google Maps. Particular tasks included refactoring embed codebase, and rendering code for 3D overlays in driving directions.
- **Specialty Pegmen** - 20% Project. Created 3D modeling and sprite generation pipeline for authoring over 20 Street View "specialty Pegman". Technologies involved Python / ImageMagick for image processing and C++ / Javascript additions to Google Maps code base for defining launch regions.



- **Google Doodle Gallery** - Built interactive gallery for viewing Google Doodles.
- **Google Doodles** - First Google employee to hold title "Doodle Engineer". Authored and launched Google Doodles using raw Javascript / HTML / CSS for optimal code. Particular Google Doodles I authored include the following links below



Systems Engineer - Urban Scan - 2005 - 2007

Urban Scan was a small start-up focused on developing automated 3D modeling techniques for urban environments. Acquired by Google.

- Writing C++ code for real-time acquisition sensor platform composed of cameras, GPS, and laser scanners.
- Design and manufacture custom cabling / PCBs / power components.
- Evaluation, research and purchasing of all hardware used by the company.
- Point of contact for DARPA project integrators, including calls, travel to Washington D.C. and on-site integration.

Side Projects

Tech Lead / CTO - DentalEMR - 2015

Cloud-based dental EMR (electronic medical records) webapp. Built using Python Django REST framework / POSTGRES / Angular / Gulp. Hosted on AWS.

- Architected design and evaluated technology based on requirements.
- Refined wireframes.
- Interviewed and hired additional team members.
- Agile project management and sprint planning.
- Led SCRUM meetings.

Education

MSECE, Electrical and Computer Engineering - **University of Iowa** - 2001-2003

BSEE, Electrical Engineering - **University of Iowa** - 1998-2001

Patents

Evaluating Three-Dimensional Geographical Environments Using A Divided Bounding Area

Publications

Generation of Real-Time Synthetic Environment Using a Mobile Sensor Platform