Bradley Bossard

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Senior developer and **Xoogler** with over 15 years of experience.
I enjoy solving interesting problems and learning new technologies.

Experience

Senior Software Engineer - Venue Next - *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.

Frontend Developer - Aniden Interactive - *2012-2016*

At Aniden, I was involved in developing interactive projects for clients like HP, Yahoo and Exxon, using a diverse mix of technologies. A small sampling of projects would include the following:

- **Yahoo Doodle** - Created Python pipeline to optimize and sprite an image sequence and custom Javascript for the Yahoo homepage to handle loading and animating the sprite.
- **Race For The Stars** - Virtual reality game built using Unity 3D for the client and MEAN JS stack on the backend scoreboard. App allows users to race through an HP datacenter in a Temple Run-like game and compete for the best times/scores.
- **Finish Drawing** - Web app game entered for **Wacom Inkation** contest, winning 3rd place. Game pairs an adjective/noun combo and asks the user to finish the drawing in 10 seconds given a random line, then adds it to a gallery. Built using MEAN JS and Wacom WILL API.
- [Touch table] - Large interactive tabletop timeline for Baker Hughes Employee Education Center. Multi-user experience allows users to touch the screen to animate a spline and explore events in the companies history. Built using Chrome App framework and HTML canvas.
- **HP Discover Mobility Experience** - Trade show piece that allows users to navigate forward/backwards through a series of animations. Written as a JS Chrome App, deployed on touch wall and tablets.
- **Cliphoarder** - WinJS app and unreleashed Android app for copying assets from clipboard into local/Sky-Drive/Dropbox stores. Development used WinJS, Android SDK, and Dropbox/Skydrive APIs.
- **Android Kiosk Apps** - Native Android apps for HP devices for retail applications.
  - **HP 7 VoiceTab**
  - **HP 7 Slate**
  - **HP Slatebook X2**
  - **HP Slate 21**
- **MPM** - Project management app for visualizing project milestones over hundreds of project simutaneously in a corporate setting. PHP/MySQL backend, jQuery and assorted frameworks on the frontend.
- **Digital Signage** - Multiple 120" touchwall kiosk projects, some using Flash, others implemented using Chrome Packaged apps using HTML5 canvas for rendering.

Experience cont.

Software Engineer - Google - *2007-2012*

While at Google, I have namely worked in geo-related (digital mapping) technologies, and have been involved in…

- **Google Earth 3D Buildings** - C++ pipeline for the automated creation of 3D buildings using LIDAR and aerial imagery.
- **Google Builing Maker** - C++ pipeline/server for serving tiled, hierarchical aerial imagery.
- **Wapner** - Django-based internal tool for scoring 3D content. **Patent** issued for work on this project.
- **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.
- **Speciality Pegmen** - 20% project to create a 3D modeling and sprite generation pipeline for creating "speciality Pegman" for Streetview. Authored and Launched over 20 special Pegman used to celebrate certain holidays or special Street View imagery collection launches.
- **Google Doodles** - First to hold actual title "Doodle Engineer". Authored and launched interactive doodles. Implemented the initial version of the **Doodle Gallery** in Django/Python on Google App Engine.

Particular Doodles I authored include the following links below

- 46th Anniversary of Star Trek's 1st Broadcast

- Halloween 2011

- Art Clokey's 90th Birthday

- Total Lunar Ellipse

Systems Engineer - Urban Scan - *2005 - 2007*

Urban Scan was a small start-up focused on developing automated 3D modeling techniques for urban environments. During my two years, I was responsible for the following…

- Writing C++ code for real-time acquisition sensor platform composed of cameras, GPS, and laser scanners.
- Design and manufacture soldering custom cabling/PCBs, and power supply used by all onboard sensors.
- 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.

Portfolio

- **Github**
- **Codepen**
- **stackoverflow**
- **Docker Hub**
- **CodeWars**

Side Projects

CTO - DentalEMR - *2015*

Cloud-based dental EMR (electronic medical records) solution. Architected and built the initial framework using Django and Angular. Interviewed and hired additional team members. Built and refined wireframes. Followed SCRUMM project management principles.

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

`./images/pegman.png`