**Brian Lee**

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**Work Experience**

**Software Engineer, ServiceMax, Pleasanton, CA**  April 2015 -- Current

* Agile methodology for feature implementation and defect fixes for field service enterprise.
* Worked on cross-platform integration on single framework for iOS, Android, and Windows desktop devices.
* Wrote extensive unit test cases for test-driven development using QUnit framework.
* Extensive use of Javascript/jQuery for implementation of asynchronous calls to handle data between ServiceMax application and Salesforce.
* Worked with remote team daily to complete code sprint objectives.
* Encourage pair programming and collaboration to build a cohesive platform framework.
* Log work efforts and organize tasks for code sprints through JIRA.

**Undergraduate Summer Researcher, Dr. Andrew Kahng, UCSD** June 2014 – September 2014

* Created algorithm to count number of trees in a given overhead map image.
* Used Google’s Static Maps API to retrieve overview maps over large areas with just latitude/longitude coordinates.
* Implemented different image manipulation techniques to improve algorithm precision and runtime
* Implemented machine learning algorithms to efficiently and precisely count trees throughout large maps
* Using color values and texture, was able to create an algorithm that counts trees in overview map with ~16 percentage error.

**Software Engineer Intern, CliniComp, Intl., San Diego, CA** June 2013 – June 2014

* Agile web application development using Eclipse IDE.
* Created web application UI using HTML and Javascript with Ext JS 4 and HighCharts JS to display hospital patient data via click-and-drag widgets onto a grid, with a focus on front-end development.

**Personal Projects**

**iOS Application Development ("HotTub")**

* Lead weekly meetings with team to discuss the week's objectives for application.
* Creating social application targeted towards students and communication amongst peers within a certain physical range.
* Programming with xcode for iOS and testing different Publisher/Subcriber frameworks.

**Previous Projects**

**San Diego Coastkeeper Web Application (Project Manager) |** UCSD GlobalTIES

* Lead team meetings and discussions, addressing project issues and objectives
* Troubleshoot and fix bugs on web application project using PHP, Ajax, jQuery, that is used to track number of organisms and human activity along beaches to be used for research.

**Mobile Application Development (Software Development Lead)**| FiTrack

* Created mobile application for fitness workout tracking RSS feeds on CrossFit, a popular fitness program, for users to be able to track their workout routine, weights, exercises, and schedule.
* Scrum Development; managed team schedule and organized layout of tasks and deadlines
* Used Android 2.3.3 for application development
* Worked on front-end user interface programming using Java and XML through Eclipse

**Computer Vision & Image Manipulation**

* Implemented feature detection, image segmentation, motion estimation, object recognition, and 3-D shape reconstruction through stereo, photometric stereo, and structure from motion in Matlab

**Statistical Artificial Intelligence Analysis**

* Implementation of search algorithms, randomized search algorithms, syntax and semantics of first-order logic, knowledge representation in FOL including reasoning, basic reasoning with probabilities, basic Bayesian learning in Matlab
* Implementation of reasoning and learning with Bayesian networks, decision making under uncertainty, sequential decision making, statistical learning methods, and reinforcement learning in Matlab

**Education**

**University of California – San Diego** September 2014

Bachelor of Science – Computer Science

**Leadership Positions**

**President** | Chinese American Student Association | UC San Diego April 2013 – April 2014

**Head of Staff**  Sept 2012 – April 2013

**Public Relations** August 2011 – April 2013 **Stanford University** | Medical Volunteer | San Jose, CA May 2009 – March 2010