

Brian Chan

Software Engineer at Google

Mountain View, CA - Email me on Indeed: [indeed.com/r/Brian-Chan/c0f341956ab1e465](https://www.indeed.com/r/Brian-Chan/c0f341956ab1e465)

"Think long term, deliver on short term."

That has been my motto throughout my career. We just got to deliver in this ever changing world. Opportunities come and go. Catch it when you can still see it.

Being a creative and innovative person, I enjoy trying out the cutting-edge technologies to solve existing real-life challenges. I have learned that complexity can be broken down into simplicity with the appropriate tools and methods. I also have an open mind to new approaches in solution implementation. I listen to different voices and then come up with the best solution to execute.

I have always been a full stack web developer, working on both front-end and server-side coding. Most of my web applications use PHP, Python, jquery, and mysql with good design patterns. I have set up and used memcache for caching on a heavy traffic site with restful web services. I can also develop cloud applications on google app engine, so that there is no need to worry about tuning production servers. I have also extensively used regular expressions for developing bioinformatics applications.

If you are looking for a fun yet serious programmer, please don't hesitate to contact me. I would love to further discuss your needs and what I can bring to the table.

Authorized to work in the US for any employer

WORK EXPERIENCE

Software Engineer

Google - Mountain View, CA - January 2016 to Present

Responsibilities

Develop internal dashboards for EDA lab cloud machines using Kubernetes (Borgmon).

- To monitor cloud machines using pods, labels/selectors, controllers and services.
- Modify borg jobs, construct tables and charts in Google Closure, Javascript, and CSS.
- Using the engineering build stack to push to the production branch. Using tools like blaze, BigTable, colossus, fileutil, dygraphs, Google Visualization API (gviz), etc.
- Numerous CLs (links/screenshots available upon request)

Frontend Developer

Facebook - Menlo Park, CA - July 2015 to January 2016

Responsibilities

Develop an internal dashboard charting app called Unidash.

- The purpose of this role is to unify internal dashboard apps, and to promote internal dashboard app consumption (vs paying license fees for 3rd party solutions).
- Develop internal charts/widgets in Hack, ReactJS, Javascript, CSS, and HighCharts.
- Using the engineering build stack to contribute changes to the www repo. Using tools like arc, hg, t, flow, jest, crud, fbide, etc.
- 60+ tasks/diffs completed (links/screenshots available upon request)

Python Automation Engineer

Apple - Cupertino, CA - April 2015 to July 2015

Responsibilities

Handles Maps tiles validation and automates the QA workflow.

- Performed global-scale Map tile check in Spectrum using Groovy, Hadoop, and Python.
- Wrote Python library files to auto-populate optimal zoom, polygon and tile info for the POIs testcase files. This automation process reduces at least 50% of the manual effort.
- Wrote a parser in Python to convert numerous types of tile testcase files to/from csv files, thus enabling QAs to directly modify in csv/excel, saving overall QA time.
- Created a dashboard in Django to measure internal testrun pass/fail rate. Charts are primarily developed using HighCharts.

Technical Consultant

Google - Mountain View, CA - February 2013 to March 2015

Developed internal App Engine applications, and managed business intelligence projects.

- Sole engineer to build an App Engine internal application in Python/jQuery/CSS/CloudSQL to gather improvements/new ideas on existing workflows from all vendor staffs around the world. The ranking of these ideas is determined by the users' rating and comments. These ideas will then go through an internal approval process to get reviewed/implemented.
- Build an internal web tool in PHP/MySQL/jQuery/Bootstrap/HighCharts on the LAMP stack to track Costperunit metrics. This tool measures and analyzes vendor productivity.
- Build a variety of metrics charts with complex SQL queries from internal marketing and sales data to generate business intelligence. These charts are used to gauge the market direction and to make strategic planning.
- Build various tools to automate existing workflows using trix, pipewrench, plx, cns, etc.

Web Developer

Apple - Cupertino, CA - June 2011 to February 2013

Developed an internal website and various automation tools for the iOS wireless division.

- Being the sole developer to design and maintain a progress reporting website for an organization of 300+ QA/Dev members. Such visualization tool gives daily insight to the upper managers to discover bottlenecks early on in project cycles.
- Developed a heat-map visualization tool for automated build tests. Software managers can then easily spot out the most critical bugs and prioritize accordingly.
- Developed an Excel import/export tool to interact with the company's centralized bug tracking system. This significantly speeds up many of the existing QA work flows.
- Created many project specific charts using HighCharts (<http://www.highcharts.com/>).
- Designed and maintained the underlying MySQL and PostgreSQL databases.
- Mentored a few summer interns.

Component Design Engineer

Intel Corporation - Santa Clara, CA - June 2008 to May 2011

This position supports internal automation tools for the CPU and chipset groups.

- Developing automation workflows. My work group has 10 engineers handling project specification gathering, scheduling, implementation, training and support.
- Developed a python error checking tool written in object oriented fashion to check for disconnected nodes/edges in a given graph/tree.
- Developed a python conversion tool in object oriented fashion to convert Microsoft Word files to internal XML files using an open source python xml library.

- Responsible for development, deployment, and support of a database-driven, .NET WinForm application to access huge amount of register information, and to dynamically generate internal documents.
- Handling DBA tasks on SQL Server 2008 involving user account management, backup/restore tasks, replication setup, and procedural/functional programming.

Genomic Facilities, System Admin

UC Davis - Davis, CA - September 2005 to June 2008

- Being the only programmer, database admin, and IT support person for the whole DNA department. Owned all aspects of projects, including design, implementation, and database administration.
- Developed the entire Lab Management System web application with LAMP (PHP, Python and MySQL), currently operating at <http://cgf.ucdavis.edu> to keep track of DNA experiments and handle DNA analysis in BLAST.
- Developed various bioinformatics Python scripts for the lab researchers to automate their DNA analysis research.

Intern programmer

Yahoo - Sunnyvale, CA - June 2004 to August 2004

- Created a graphical reporting tool using PHP and MySQL to monitor the progress of the mail servers' patch update process.

Programmer

UC Davis, Vegetable and Crop Department - Davis, CA - April 2001 to June 2004

- Created a bio-informatics visualization tool in Python called ContigViewer, available at http://www.atgc.org/Py_ContigViewer/. Involved GUI development as well as implementing complex algorithms.
- Created a clustering tool called Graph9 based on adjacency matrices, available at http://www.atgc.org/BlastParser/Graph9_Program.html

EDUCATION

Bachelor of Arts in Computer Science

University of California - Davis, CA
June 2004

Bachelor of Arts in Mathematics

University of California - Davis, CA
June 2004

SKILLS

PHP (10+ years), Python (7 years), JQuery (7 years), CSS3 (3 years), CSS (5 years), MySQL (10+ years), Git (5 years)

LINKS

<http://brianchan.us>

<http://www.linkedin.com/in/chanbrian/>

<https://itunes.apple.com/us/artist/brian-chan/id385436920>

CERTIFICATIONS/LICENSES

Machine Learning by Stanford University

August 2016 to Present

<https://www.coursera.org/account/accomplishments/certificate/UMMTVW5ZTQPX>

Programming Mobile Applications for Android by University of Maryland

September 2016 to Present

<https://www.coursera.org/account/accomplishments/certificate/T6XG7F929FCS>

ADDITIONAL INFORMATION

Skills

- Web Development Appengine, Django, Python, PHP, React, jQuery, CSS
- Programming Languages: .Net Framework, VB.NET, C, C++
- Mobile App Development: Objective-C, Swift, Java, Xcode, Appcelerator Titanium
- Database: MySQL, PostgreSQL, SQL 2008
- SCM: Git, CVS, Perforce
- Operating Systems: OSX, Linux, Windows
- Languages: English, Cantonese, Mandarin

Personal Projects

tvOS Apps

- TuYu <https://www.appannie.com/apps/appletv/app/1076137657/>

iPhone Apps

- Solutions for Candy Crush <https://itunes.apple.com/us/app/solutions-for-candy-crush/id622416243?mt=8>
- Current Location <https://itunes.apple.com/us/app/id385436917?mt=8>
- Country Code <https://itunes.apple.com/us/app/country-code/id417620424?mt=8>
- Phone Area Code <https://itunes.apple.com/us/app/phone-area-code/id417199583?mt=8>
- Calendar Location <https://itunes.apple.com/us/app/calendar-location/id435281189?mt=8>

Google App Engine

- Mobile Phones <http://mobile-phones.appspot.com/>
- Puzzle game solutions <http://puzzlegames-solutions.appspot.com/>
- Excel2json <http://excel2json.appspot.com/>
- Chat with Alice <http://chat-with-alice-hrd.appspot.com/>