**Neil Bhargava**

**(480) 242-3954 - neilb@email.arizona.edu**

**Education**

**Bachelor of Science in Electrical Engineering**

University of Arizona | **May 2012**

Minors: Computer Engineering and Math

Additional: Dean's List. Honors College, WildCat Excellence Scholarship, APIASF Scholarship Fund

**Proficiencies**

**Languages**: Swift, Objective C, HTML, CSS, Javascript, SQL, C#, Java

**Backend Work**: Firebase (Architecture / Cloud functions), Node.js

**Programs/Misc**: Adobe Creative Suite

**Professional Affiliations**

**Blueprint Apps** 2014 June – Present

Founder, Phoenix, AZ / San Francisco, CA

* Custom software shop where we handcraft solutions and provide consultation for companies who want to take their project from the inception of their idea to production.
* Projects/Apps include: Trust, SportsAnalytics, BuildKeeper, Wingpicked, BallersBridge, PlayCaller, PushPress.

**Elementum** 2014 September - Present

iOS Developer, San Francisco, CA

* Soon after joining, became the principal iOS dev on Elementum’s flagship app, Source. Worked closely with UI/UX/PM to iterate quickly on this rapidly evolving application. Also worked on Manufacture, Transport, and Inventory.
* Helped build a system where our backend’s response drove and configured the app’s UI (Patent Pending)
* Designed Elementum Apple Watch app from scratch
* Built custom charts using CoreGraphics
* Helped develop Elementum’s stack of 100% Swift frameworks (ElementumKit and FeatureKt) to help share features between our multiple apps. This uses a messaging based feature system to integrate and customize the way features work in different applications

**BlueCross BlueShield of Arizona** 2012 June- 2014 September

Programmer II, Phoenix, AZ

* Application development team.
* Developed iOS mobile apps, including Bill Pay, ID Card, iOS7 redesign, SSO architecture, upgrading from mrc to arc, etc.
* Developed AZBlue's web-tier .NET applications.

**ADTRAN** 2011 June- 2011 August

Intern, Phoenix, AZ

* Assembled and tested numerous telecommunication devices such as optical filters, optical amplifiers, DWDM and CWDM muxes/demuxes, Ethernet optical switches (ETOS), sonnetoptical switches (STOS).
* Created java software that reads raw Hex data from SFPs and parses it into readable data.
* Created clock dividers in VHDL.
* Programmed EEPROMs.
* Soldered/Surface mounted various components on PCBs.

**IBM** 2010 June- 2010 December

Hardware Technician Co-op, Tucson, AZ

* Maintained the servers for the global Tivoli Productivity Center for Replication (TPCR) team.
* Fixed various types of hosts, servers, storage, and other machines as well as installing hardware and software

**University of Arizona** Spring 2011

Circuits Lab Teaching Assistant, Tucson, AZ

* Provided assistance to students during electronic circuits lab.

**Pro Audio Entertainment** 2004-Present

Founder and DJ, Phoenix, AZ

* Managed work associates and maintained customer relations

**Engineering Student Council** 2010 Fall - 2011 Spring

Webmaster, Tucson, AZ

* Developed and maintained the clubs website.

**Projects**

**Ballers Bridge**

This iOS application allows athletes to create a digital player card in which they can store all their digital media including pictures, videos, and badges related to their athletic career. New features are being added to this app on a monthly basis. Designed the rails API, integrated with AWS S3, and wrote the code base nearly from the ground up.

https://itunes.apple.com/us/app/ballers-bridge/id1001892133?mt=8

**BuildKeeper**

This application is a time tracking and job-costing app for contractors. Developed the app from the ground up. Worked closely with the CEO of this company to design the required API’s for this. https://itunes.apple.com/us/app/buildkeeper-time-tracking/id963445368?mt=8

**WingPicked**

This iOS application allows users to post two pictures of themselves in two different outfits and crowdsources votes to determine which outfit is better. The feature base is very similar to that of Instagram. The backend was built out with Parse and Cloud Code.

**Play My Song**

This iOS application allows partygoers to request songs to the DJ at the current event they are at. Whether they are downtown with numerous clubs surrounding them, geolocation will limit users from voting if they are outside of the geofenced perimeter. The backend service layer was created using .NET MVC API and the iTunes API for its vast library of songs. App is available at: <https://itunes.apple.com/us/app/play-my-song-request-songs/id905172622?mt=8>.

**Sudoku Picture Solver**

This Android app allows a user to take a picture of an unsolved Sudoku puzzle, and the app will transcribe the image and solve the puzzle. Image processing was used via the tesseract API. Image processing techniques and optical character recognition (OCR) was used to convert the image into a processable data structure. The Sudoku puzzle was then solved using P. Tellenbach's Sudoku Solving algorithm and displayed to the user.

**Doodle Web App**

Multiplayer HTML5 Game that is similar to the common game of Pictionary. One user draws an image of a prompted random word. The other player has to guess this word. Turns alternate. Drawings, users, score, are connected to a MySQL database via PHP.

**Who Follows Us**

This app allows users to find out who doesn't follow them back on Instagram :). I came up with a javascript algorithm that hits the Instagram servers recursively in order to get full lists of both 'followers' and 'followees'. The lists are then iterated thru to find the differences. The app is available at: <https://www.whofollows.us>.