# **Mohit Bhalla**

# **Employment History**

#### Amazon Inc. - Amazon Care

## Software Development Engineer

Apr '18 - Present

- Built Audio/Video conferencing capability within Android App by leveraging WebRTC and leverage Amazon Connect for Queuing participants and build instrumentation monitoring audio/video quality in real time (<u>also awarded patent for it by USPTO</u>).
- Creating a QoS measurement scheme for baselining WebRTC video calls using raw WebRTC stats.
- Built CallKit-like for Android feature for thee Amazon Care Android App to enable people receiving calls from Amazon Care.
- Influenced engineering team to build new and migrate existing features in Kotlin and adopt Kotlin Coroutines for Asynchronous Programming without compromising testability and ensuring high code quality.
- Modularize the Android Team's codebase into separate unit for quicker compilation times for local development.
- Creating a backend infrastructure to receive high volume of Customer metrics using AWS Kinesis.
- Enabling team work within the Android team and delivering results within a team environment by coaching and collaboration.

## Amazon Inc. - Amazon Flex App

## Software Development Engineer

Sept '17 - Apr'18

- Worked as a Platform Engineer on the Amazon Flex app and worked on large scale performance issues on the Flex App, primarily Memory and UI Thread performance.
- Created a in-app mechanism to record CPU, Network, Memory, Battery stats in a particular UX workflow to allow profiling customer facing features and detect performance regressions.
- Created a mechanism to audit Android Permissions introduced in the multiple apk's generated by the Android Build System and break C.I. builds when permissions that have not been approved by PR/Legal team.

#### AWS. - Silk Web Browser

### Software Development Engineer

https://goo.gl/dCw1HU

Dec '15 - Sept'17

- Advocated and Led development of a <u>leanback</u> experience for <u>Silk on FireTV by developing the "HomeMenu" launcher interface</u>. I was also responsible in creating an Optimal Navigational Cursor implementation which allowed customers to navigate and scroll and and interact with web page elements. This was a crucial customer win for FireTV platform as there is no-other application which allowed web page browsing before the Silk for FireTV app.
- Implemented Complex *Intent Handling* mechanism for Silk on FireTablets and FireTv platforms and improved end to end and unit test coverage for the codepaths around the feature to allow external apps to open Silk and Silk to redirect 2-P and 3-P deep links on Android/FireOS platform.
- Fix Multiple Memory Leaks and detect performance issues within Silk "Send Feedback" mechanism to allow a smooth customer experience by minimizing network calls and re-using cached customer session information

#### INRIX Inc.

## Software Development Engineer

Oct '14 - Dec '15

Employed as Software Developer and working on the Android Mobile Development Client team for INRIX, Inc., which delivers Real Traffic information and allied services to Business and general consumers.

## Pacific Northwest National Laboratory: US Dept. of Energy/ Battelle Memorial Institute

# Software Engineering Intern

Summer 2013 & Summer 2014

Primary software developer, and made the framework for both the server and client side of the <u>Android Application</u> using <u>Java EE Framework</u>. Developed a real time server client application, which pulls soft real time data from the server on the devices in the form of push notifications or a News Feed, as well as other data collection systems.

## On Route Digital Media Inc

Software Engineering Co-Op Intern

Spring '13 - May '14

Software Engineering Intern at a Syracuse University based startup to create Mobile and Web Application Framework using <u>Android SDK And JavaScript</u> for delivering Hyper-Local Ad Content and improving targeting of potential users. Incorporating <u>GPS Geo Fencing and Bluetooth Low Energy Beacon</u> Technology to deliver offers.

#### **Education & Coursework**

Master of Science in Computer Engineering:

New York,

May 2014

Syracuse University, L.C. Smith College of Eng. and Computer Science

GPA 3.55/4.0.

<u>Graduate Courses</u>: Design and Analysis of Algorithms, Software Modeling and Analysis, Software Engineering, Object Oriented Design, Mobile Application Development, And Analytical Data Mining. Advanced Computer Architecture, Computer Security, Mobile OS Security, Distributed Objects in Linux and Windows.

Bachelor of Technology in Computer Science Engineering

New Delhi India,

August 2012 *GPA 3.97/4.0*.

Guru Gobind Singh Indraprastha University.

# **Select Technical Project**

Food Feed, (Android App, not on play Store)

Android Software Engineer in an In-House Mobile App Development Competition for the US Dept. of Energy, among a team of 4 interns (2 Data Analytics + 1 Designer) to develop a real time server client application which pulls soft real time data from the server on the devices in the form of push notifications or a News Feed, as well as other data collection systems. The app is property of the National Lab.

Held responsibility as a Primary software developer, and made the framework for both the server and client side of the Android Application.

# Languages and Technologies

Languages: C, Objective-C, C++, C#, Java, .Net Framework, PHP, Bash Scripting, PL/SQL, Java Script, Python.

IDE: Visual Studio, Eclipse/Apache, IntelliJ Based Toolkits (Android Studio, IntelliJ IDEA).

Platforms: Mac OS X, Windows NT Based Systems, MSDOS, Linux/Unix.

<u>Databases:</u> Oracle, Microsoft SQL Server, My SQL, CouchDB, Apache Solr Indexing System.

Other tools: HTML, CSS, MS Office, Networking, hardware and Software skills, Computer Architecture.

Version Control Tools: Git

#### **Awards and Merits**

• Secured 1st Position at Mobile App Dev. Competition held at Pacific Northwestern National Laboratory, Richland Washington designing a Bio Surveillance Application for U.S. Dept. of Energy / U.S. Dept. of Defense Project.

Media Related to Achievement

https://www.voutube.com/watch?v=HVIv1bWt29Y

http://www.pnnl.gov/news/release.aspx?id=1015

http://vis.pnnl.gov/people/michael.j.henry/

- Merit Scholarship Holder in the Graduate Computer Engineering Program Covering 50% Tuition Costs.
- Second prize winner at the Embedded Systems Design programming Competition in 2008-09.
- Secured 2nd Position in Netaji Subas Institute of Technology Annual Tech Fest INNOVISION in LINUX CHALLENGE in March 2011 Sponsored by IEEE India