I have 10 years of experience - 5 years in corporate and 5 years in startups. I mostly work on Nodejs and backends. I also use ReactJs/native, Android/iOS native, some data science algorithms and embedded stacks/C/C++ to build MVPs.

## **Experience** Timeline

Since July Halfchess (www.halfchess.com) - a game for improving your chess skills while spending lesser (10 months) time. Halfchess has been growing viral and has more and more users everyday. I have done

everything in this project - from conceptualizing, to designing an icon, to setting up scalable

Independent servers on gcloud. works

Responsibilities & Highlights

Archiejs (https://qithub.com/archiejs) - an open-source nodejs dependency injection framework which makes it easier to write maintainable code, easier to create testcases, etc.

Various small freelance projects - (1) An offline OCR Library on Android for reading bills, cards and other documents. The library extracts useful fields from complex documents in realtime.

(2) A gcloud serverless app for migrating data to Zoho, etc

July 2016 to A high concurrency bus data aggregator, for finding and booking bus tickets (2 months) Nov 2015 We worked in a team of 3 backend developers and had a very quick turnaround time. We are (8 months) able to aggregate buses from many different aggregators in realtime and provide more buses on our platform than our competition. (tech: nodejs, es6/7, postgres)

Consultant, <u>JioMoney</u> Bangalore, Reliance Jio

Server development for mobile wallet (3 months)

We worked in a team of 5 developers. I picked an initial architecture for the server and coded some modules in it, including the ISO 8583 client module. (tech: java play, oracle db, actor system).

To develop automation testsuite for android and iOS wallet application (2 months) We worked in a team of 3 developers and wrote about 250-300 integration testcases for Android and iOS apps from scratch. (tech: calabash, gerkin, page object model)

15 - 10 I ran two different companies between 2010 (ededaa) and 2014 (flipflopapp). Each I ran for (5 years) about 1.5 years. Flipflopapp was an IT services company for building web and mobile apps. I

had built and mentored a young team of 5 engineers.

Flipflopapp and Later, post Jan 2014, I had I worked on several startup ideas developing MVPs - as a Freelancer cofounder or as a freelancer. The projects are listed in a gist (click here).

Feb 09 - July 10 Customer issues related to audio multimedia and stability.

(1.5 years) I was a single Hyderbad PoC for any multimedia audio issues on Qualcomm chipsets Arm 9 +

Arm 11 and Arm 9 + Scorpian chipsets, coordinating across multiple teams and spread across

Qualcomm regions.

Feb 09 - July 06 Open source tools and technologies (mainly linux kernel) and BSP development for set-top-

(2.5 years)

Suggested a patch to Linux kernel community, titled "O\_DIRECT patch for processors with Conexant/NXP VIPT cache for mainline kernel"

#### Open-source and patents

Applied for a US patent on search technology while developing NewsNinja (http://www.google.ch/patents/WO2015083180A1)

Long history of contributing to open-source (http://github.com/flipflopapp and https://github.com/archiejs)

#### **Education**

Degree University Highlights

Master of Computer Guru Gobind Singh Algebraic study of discrete multidimensional signal processing, Applications, 2006 Indrap. Univ. (GGSIPU) unpublished work, MCA 3rd sem, 2004 (Link: Academic papers)

### Appendix I - Personal Data

Date of Birth, Nationality 27-11-81, INDIAN Languages English, Hindi

Interests Playing flute, Cycling, Networking, Social work, Writing, Learning about cultures

Github <a href="http://www.github.com/archiejs">http://www.github.com/flipflopapp</a>

Talks <a href="https://slid.es/navalsaini">https://slid.es/navalsaini</a>

# Appendix II - Products built and Technologies used over last 10 years

Year	Tech and Role	Products and technologies
2011 -16	Web & Mobile applications	<u>Technologies</u> : nodejs, reactjs (backbone, sencha touch), android (java), kubernetes, TDD, functional programming, google cloud functions, swift (ios), java play framework, C/openCV, Tessarect OCR, Gcloud, AWS, etc
	<b>Role:</b> Startup Founder; Consulting	Products: JioMoney Wallet, Halfchess, Convflow, SilentNinja, etc
2009 -10	Smart phone  Role: Android audio multimedia Customer Engineer	Modules: Android music application, Android framework classes, Opencore PVMF, Userspace HAL, Audio drivers, Hardware drivers for audio devices (like headset, BT headset, etc), proprietary audio routing mechanisms, etc Languages: C, C++, Java Other responsibilities: Customer training, Documentation, Software architecture support for customers Products: LG GT540 (Optimus), Samsung Galaxy, etc
2006 -09	Set top boxes  Role: Engineer in Open source and BSP team	Modules: Linux kernel, Uboot, Proprietary kernel abstraction layer (in kernel space and user space), Busybox, Uclibc library, GDB, etc BSP areas: Arm 11 application processor bring-up, porting Uboot, Memory management related issues, Arm related issues (caching), etc Languages: C, Arm assembly, Lauterbach scripting, Makefiles Products: Nevis, Pecos, Trinity (and variants)