

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

| <i>Timeline</i> | <i>Responsibilities & Highlights</i> |
|---|--|
| Since July (10 months) | Halfchess (www.halfchess.com) – a game for improving your chess skills while spending lesser 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 servers on gcloud. |
| Independent works | - An offline OCR Library on Android for reading bills, cards and other documents. The library extracts useful fields from complex documents in realtime. New document formats can be added to the library using an XML format. (demo link: to be added soon, experimental) - Archiejs (https://github.com/archiejs) – an open-source nodejs dependency injection framework which makes it easier to write maintainable code, easier to create testcases, etc. |
| July 2016 to Nov 2015 (8 months) | A high concurrency bus data aggregator, for finding and booking bus tickets (2 months) We worked in a team of 3 backend developers and had a very quick turnaround time. We are 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, JioMoney 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 (5 years) | I worked on several startup ideas developing MVPs – as a cofounder or as a freelancer. The projects are listed in a gist (click here) . |
| Flipflopapp | |
| Feb 09 – July 10 (1.5 years) | Customer issues related to audio multimedia and stability. I was a single Hyderabad PoC for any multimedia audio issues on Qualcomm chipsets Arm 9 + Arm 11 and Arm 9 + Scorpion chipsets, coordinating across multiple teams and spread across regions. |
| Qualcomm | |
| Feb 09 – July 06 (2.5 years) | Open source tools and technologies (mainly linux kernel) and BSP development for set-top-boxes. Suggested a patch to Linux kernel community, titled " O_DIRECT patch for processors with VIPT cache for mainline kernel " |
| Conexant/NXP | |

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

| <i>Degree</i> | <i>University</i> | <i>Highlights</i> |
|---------------------------------------|--|--|
| Master of Computer Applications, 2006 | Guru Gobind Singh Indrap. Univ. (GGSIPU) | Algebraic study of discrete multidimensional signal processing, unpublished work, MCA 3 rd sem, 2004 (Link: Academic papers) |

Appendix I - Personal Data

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|----------------------------|---|
| Date of Birth, Nationality | 27-11-81, INDIAN |
| Languages | English, Hindi |
| Interests | Playing flute, Cycling, Networking, Social work, Writing, Learning about cultures |
| Github | http://www.github.com/archiejs , http://www.github.com/flipflopapp |
| Talks | https://slid.es/navalsaini |

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

| <i>Year</i> | <i>Tech and Role</i> | <i>Products and technologies</i> |
|-------------|---|--|
| 2011 -16 | Web & Mobile applications Role: Startup Founder; Consulting | <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 <u>Products:</u> JioMoney Wallet, Halfchess, Convflow, SilentNinja, etc |
| 2009 -10 | Smart phone Role: Android audio multimedia Customer Engineer | <u>Modules:</u> 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 <u>Languages:</u> C, C++, Java <u>Other responsibilities:</u> Customer training, Documentation, Software architecture support for customers <u>Products:</u> LG GT540 (Optimus), Samsung Galaxy, etc |
| 2006 -09 | Set top boxes Role: Engineer in Open source and BSP team | <u>Modules:</u> Linux kernel, Uboot, Proprietary kernel abstraction layer (in kernel space and user space), Busybox, Uclibc library, GDB, etc <u>BSP areas:</u> Arm 11 application processor bring-up, porting Uboot, Memory management related issues, Arm related issues (caching), etc <u>Languages:</u> C, Arm assembly, Lauterbach scripting, Makefiles <u>Products:</u> Nevis, Pecos, Trinity (and variants) |