# Ashwin Kumar

### Architect, Entrepreneur

### Profile

A decade of solutions-driven experience in building scalable and performant applications, specializing in web tier engineering and architecture. I enjoy researching and solving problems in engineering and design, and feel right at home as a front end engineer. I take pride in my methodical process to arrive at a solution.

## Skills

LANGUAGES: JavaScript (ES6), Java, C#, PHP, HTML5, CSS3 LIBRARIES & FRAMEWORKS: React, Redux, Angular 4, RxJS, Meteor, Node, Express, GraphQL, React Native, Cordova

**DATABASES:** MySQL, MongoDB, Cassandra **TOOLS:** Git, Command Line, Gulp, Grunt, Postman, Trello, Compass, Workbench

## Areas of Expertise

- Front-end team technical leadership
- Framework & toolkit selection or development matched to business & technical reqs
- New web application architecture or re-architecture
- Performance & SEO optimization
- Problem solving & debugging
- Guidance with tooling, build automation, continuous delivery, source control, UI best practices & design patterns, coding standards, maintenance, quality, future-proofing, browser standards & compatibility, REST APIs, User Experience, Functional Programming, Agile Methodology

# Work Experience

#### CAPILLARY TECHNOLOGIES — SOFTWARE DEVELOPMENT ENGINEER-II — JANUARY 2016 - PRESENT

- Provided expert guidance and hands-on development for project GRD4 (Pizza Hut MENA Region), a progressive web app
- Delivered initial POC using existing API's in a very aggressive timeline which played a crucial role in acquisition of project, competed by four vendors world-wide
- Re-architected the existing Cassandra solution to include custom types
- Worked on several POC's (GraphQL, React, Angular2, OData, Redis) to choose a technology stack
- Provided technical leadership to the team and solved several problems during the course of the project

#### **INFOSAGE SYSTEMS — SENIOR SOFTWARE ENGINEER —** NOVEMBER 2010 - DECEMBER 2015

- Involved in design, development and management of several projects in healthcare, telecommunication and e-commerce domains
- Worked closely with the stakeholders in gathering requirements and prioritizing
- Adopted agile practices to streamline the development

#### CONCEPTWAVES - SOFTWARE ENGINEER - AUGUST 2008 - NOVEMBER 2010

- Actively involved in development of an existing java based product "TuningFork"
- Redesigned the entire application's GUI for better usability
- Worked on apache struts and hibernate frameworks

#### EDUCATION

Bachelor of Technology — Computer Science — 2007

### **Projects:**

#### GLOBAL RESPONSIVE DESIGN 4 PIZZA HUT — MIDDLE EAST AND NORTHERN AFRICA REGION

Primarily targeted at mobile users, the idea behind GRD4 is to keep the response times under 100ms. This project was competed by four vendors world-wide. I was given charge of delivering the initial proof of concept. For the POC, I had to use the existing infrastructure, whose API response times start at 500ms. Chose to use Meteor and Framework7 as tech stack, which asynchronously makes multiple API calls to get navigation and catalog data on app init and cache it locally, which gave an illusion of being app-like. The POC was an instant success, it played a crucial role in the acquisition of the project.

In the process of finding a solution, I have worked on several POC's and used wide array of technologies while studying existing infrastructure. Although the ideal choice of the stack was GraphQL, React, Cassandra, decided to use Angular 2, Cassandra, <u>ASP.NET</u> Web API's, because of the non-availability of developers in the chosen stack.

Re-architected the existing Cassandra solution to include custom types, architected and bootstrapped the Angular 2 app by using RxJS to communicate with the API's. The challenge with the application is that it should support multiple merchants with a single code base, but allows the developers to edit templates as required. Used Gulp to solve this by bringing out templates from the code base and copying the templates as required. Created a command line interface to streamline the development process.

Introduced progressive web app concepts to the project to cache the app-shell and data that doesn't change very often.

#### WEBRTC TELEPHONY CLIENT — ASPECT SOFTWARE

A html5, WEB-RTC based framework that plugs in to existing telephony architecture and communicates with Aspect UIP platform.

#### US RECRUITMENT AGENCY APPLICATION CLIENT BASED OUT OF NEW JERSEY

An end-to-end application to manage all the office related activities from creating emails for employees to generating payrolls based on Node JS, Mongo DB, CSS3, JavaScript

- Involved in requirement analysis, design and development
- Used Haraka JS for email server, created a custom plugin to use Mongo DB for storing the emails
- Integration with Twilio, for audio calls using webRTC
- Ported the application to desktop environment using node-webkit.

#### POKER CLUB MANAGEMENT

#### SELF

A realtime mobile application that manages poker club finances and generates reports on demand. Built using MeteorJS, ported to android using Cordova.

#### CHILDREN'S AUDIO STORIES APPLICATION — LOLLIPOP ENTERTAINMENTS

A mobile app for both iOS and Android that plays children's audio stories on demand. Launched by singer Mr. S. P. Balasubrahmanyam. <u>Android</u> | <u>iOS</u>