

VARUN NAGPAL

Website: www.VarunNagpal.com

Phone: +1 416 799 9223

Author

- Author of an Android Development book “**Android Sensor Programming By Example**” with Packt Publishing. To get the book details, go to [Publisher Weblink](#) and [Amazon Weblink](#).



Researcher & Inventor

- Researcher and inventor of two patents for Allstate Insurance (United States).
 - [To detect phone movement within a vehicle using phone sensor.\(Hyperlink\)](#)
 - [To hard turns while driving using phone sensors. \(Hyperlink\)](#)

Solution Architect

- AWS Certified Solution Architect (Certified in June 2018 with 90% score, Key: 3VYJ5JECJERE1S5N)
- More than 11 years of strong experience in mobile, cloud and web application development, architecture and management. More than 4 years of architect experience with Allstate Insurance, currently working as Software Architect in Tech start-up in Downtown, Toronto on their multiple products ([AskForTask](#), [Airzai](#), etc).
- Global exposure, worked in multiple countries, like Canada (1 year), United States (4 years), India (6 years) with Fortune 100 companies like Allstate Insurance, Verizon, AT&T, Nandos, etc.

Area of Expertise

- **Mobile**
 - Android Apps, iOS Apps, Cross Platform apps (React Native, Xamarin), Hybrid Apps (Cordova, Phonegap, Ionic Framework), Responsive Web Apps. Worked on more than 100 mobile apps for various corporate clients.
- **Web**
 - Web Apps (React JS, Angular JS, Vue JS, JavaScript, HTML, CSS). Also expertise on backend Node JS, Apache, Nginx, J2EE, Micro-services, REST APIs, etc.
- **Cloud**
 - Cloud platform (AWS, Azure, Google Cloud Platform) cloud services like, EC2, Compute Engine, Containers services (Docker, Kubernetes), server-less architecture (AWS Lambda, Cloud functions), NoSQL (DynamoDB, Table Storage, MongoDB), SQL (RDS, Cloud & Managed SQL), Caching (Redis, Mem cached, CDN), API Gateway, Cloud Security (VPC, IAM, Firewalls).
- **DevOps, IOT, Machine Learning**
 - DevOps expert, implemented CI/CD and automation strategy for mobile and cloud using Git, Gitlabs, Github CI, HockeyApp, Test Flight, Jenkins, CircleCI, Travis, Code Pipeline, etc.
 - IOT (Internet of Things) expert, implemented MQTT messaging service, Machine Learning (models, scoring algorithms) and (BLE) Bluetooth Low Energy Stack for mobile/IOT.

Education & Certifications

- Bachelor of Technology in Computer Engineering from Jamia Millia Islamia, New Delhi.
- AWS Certified Solution Architect (Certified in June 2018, scored 90% marks).
- SCJP (Core Java, 80%).
- SCWCD (JSP & Servlets, 91%).
- MCP (C#, 98%).
- MCTS (ASP.NET, 93%).
- WIPO (Basic Course in Intellectual Property Rights, 94%).

VARUN NAGPALWebsite: www.VarunNagpal.com

Phone: +1 416 799 9223

Projects and Employment Details

Project Name	IOT Fragrance Device for consumers and commercial customers
Client/Product	Airzai (https://airzai.com) (Toronto, Canada)
Duration	Mar 2018 till present
Technology & Tools Used	Android, Java, iOS, Swift, Objective C, Android Studio, Xcode, AWS server-less architecture, AWS IOT core, MQTT service , Lambda, S3 DynamoDB, DAX, API Gateway, React JS for frontend apps, Node JS for backend server.
Roles	Software Architect
Responsibilities	Solution Architecture, Managing development and maintenance of Android apps, iOS apps, REST APIs (using AWS API Gateway, Lambda, DynamoDB, S3). Implementing DevOps, CI/CD using Gitlab CI and Dockers. Hands-on for POC and Code reviews for production code.
Description of Project	I am working on architecting and developing complete end to end solution for a smart IOT fragrance product called "Airzai". This fragrance product diffuses essential oil at regular intervals and is controlled by Android and iOS apps using BLE (Bluetooth Low Energy). The device has Wi-Fi, BLE, and NFC and it communicates to the backend using MQTT messaging services (using AWS MQTT) and REST APIs (using AWS API Gateway, Lambda, DynamoDB). The device can also be control via frontend web apps (made using React JS) and which is supported by Node JS backend server. I am managing and architecting all the technical aspects of the product, including frontend web app (in React JS) & mobile app (native Android & iOS) development, backend Node JS server and REST APIs, databases, etc. Also improved the performance of REST APIs by using DAX (In memory DB, over DynamoDB).

Project Name	AskforTask Consumer Cleaning/Handyman services
Client/Product	AskforTask (https://www.askfortask.com) (Toronto, Canada)
Duration	Mar 2018 till present
Technology & Tools Used	Android, Java, iOS, Swift, Objective C, Android Studio, Xcode, AWS Infrastructure, Gitlab CI, Dockers, Kubernetes, PHP, Nginx, MySQL, WordPress, React JS, Node JS, MongoDB
Roles	Software Architect
Responsibilities	Solution Architecture, Managing development and maintenance of Android apps, iOS apps, Web Apps (React JS), REST APIs (on PHP/Nginx with MySQL), Node JS, on AWS EC2 and RDS. Implementing DevOps, CI/CD using Gitlab CI and Dockers. Hands-on for POC and Code reviews for production code.
Description of Project	AskforTask is the leader in Canada for home cleaning and handyman services, which connects the Taskers (home cleaner) to the Askers (Home owners, who need cleaning services) using our digital platform and provide dynamic pricing and deals. I am involved in doing the solution architecture and maintenance of Android apps, iOS apps, web apps (React JS), website (WordPress), REST APIs (using PHP/Nginx with MySQL) and Node JS backend server with MongoDB. I have also lead the efforts for modernization and automation of the platform by implementing DevOps, CI/CD processing using Gitlab CI, Dockers and automating a lot of manual processes to improve efficiency and turnaround time. I also lead the efforts in the migrating all the infrastructure to AWS EC2, EBS, RDS, Route 53, Cloud Front, S3, VPC (Subnet & Firewalls), AWS Code Pipeline, code commit.
App Store URLs	Web App: https://www.askfortask.com/ Google Play: https://play.google.com/store/apps/details?id=com.askfortask.askfortaskaskerapp https://play.google.com/store/apps/details?id=com.ionicframework.askfortasktaskers798263 App Store: https://itunes.apple.com/ca/app/askfortask-request-cleaners/id855385006?mt=8 https://itunes.apple.com/ca/app/tasker-askfortask/id1058677491?mt=8

VARUN NAGPALWebsite: www.VarunNagpal.com

Phone: +1 416 799 9223

Project Name	Android, iOS and Web Apps for Health and Wellness Platform
Client/Product	The Wellness Platform (Toronto, Canada)
Duration	Oct 2017 to Feb 2018
Technology & Tools Used	Android, Java, iOS, Swift, Objective C, Android Studio, Xcode, AWS Infrastructure, Server-less architecture using Lambda and API Gateway.
Roles	Software Architect/Lead Developer
Responsibilities	Solution Architecture, Managing development of Android App, iOS apps React JS web apps, Setup, maintenance and development of AWS infrastructure (API Gateway, Lambda, DynamoDB, S3). Active Hand-on development of many mobile modules.
Description of Project	<p>Architecting and developing complete end to end solution for a start-up/product called "The Wellness Platform" to implement their health and wellness platform on mobile native and web apps. Their health and wellness apps include showing of dynamic content (text, image, audio, video) from AWS backend infrastructure. Other features of the apps include user login (Custom, Facebook, Google), comments on the content, user profile, user progress, dynamic leader board, points scoring and management, etc. Integrated the following services and SDK for the Android and iOS apps.</p> <p>1. AWS DynamoDB, 2. Lambda, 3. S3, 4. Mobile Hub SDK, 4. Google and Facebook Authentication SDK, 5. Google Firebase Push Notifications, 6. Google Firebase Crash and App Analytics</p> <p>First version of the app on Google Play Store: https://play.google.com/store/apps/details?id=com.css.selfhealing</p>

Project Name	IOT (Internet Of Things) Bluetooth Tag SDK/App development for Android and iOS
Client	Allstate (Chicago, United States)
Employer	Creospan (Chicago, United States)
Duration	Aug 2016 till Sept 2017
Technology & Tools Used	Android, Java, Kotlin, iOS, Swift, Objective C, Android studio, Xcode, RESTful web APIs, JSON
Roles	Lead Developer
Responsibilities	Technical designing, architecting and development of the Android and iOS App for Tag
Description of Project	<p>Developing an Android and iOS Tag SDK and App, which uses Bluetooth Low Energy Stack APIs to communicate with IOT (Internet Of Things) Tag. This IOT hardware Tag has sensors like Accelerometer, Gyroscope, Magnetometer, which monitors the accurate driving behaviour and mileage, which is used for "Pay As You Drive" a new insurance program by Allstate. This IOT Tag is stick to the Car's windshield and it collects all driving information which is communicated to the phone (SDK/App) automatically via BLE and from phone (SDK/App) it is communicated back to Allstate servers.</p> <p>High Level Feature of IOT SDK and App</p> <ul style="list-style-type: none"> IOT Tag sends all live sensor data (Accelerometer, Gyroscope, Magnetometer) and Driving Information (Driving Started, Stopped, Hard Brake, Hard Turn, Hard Acceleration, Rash Driving and other events) back to phone (SDK/App) via BLE, which is further sent to backend servers. Phone (SDK/App) sends the new firmware flash image and configurations via BLE to the Tag hardware for updating its software dynamically. Phone (SDK/App) connects to the IOT Tag automatically, when both are in proximity and the driving information and other configurations are exchanged between them automatically without user interaction.

Project Name	Machine Learning Algorithms and their Implementation on Android and iOS
Client	Allstate (Chicago, United States)
Employer	Creospan (Chicago, United States)
Duration	7 months (Jan 2016 till July 2016)
Technology & Tools Used	Android, Java, Kotlin, iOS, Swift, Objective C, Android studio, Xcode, RESTful web APIs, JSON

VARUN NAGPAL

Website: www.VarunNagpal.com

Phone: +1 416 799 9223

Roles	Lead Developer
Responsibilities	Research and Development of Machine Learning Algorithms and their Implementation on Android and iOS
Description of Project	<ul style="list-style-type: none"> • Creating a library for Mobile Platform (Android and iOS) that could run machine learning algorithms. • Implementing the Hard Turns Machine Learning Decision Tree and Random Forests Scoring Algorithm on Android and iOS • Implementing the Hard Braking Turns Machine Learning Decision Tree and Random Forests Scoring Algorithm on Android and iOS • Filed two patents for Allstate in this project, first to detect risky driving and second hard turns detection while driving using phone sensors.

Project Name	Driving events detection app using smart phone sensors (Android and iOS)
Client	Allstate (Chicago, United States)
Employer	Creospan (Chicago, United States)
Duration	8 months (May 2015 till Dec 2015)
Technology & Tools Used	Android, Java, Kotlin, iOS, Swift, Objective C, Android studio, Xcode
Roles	Lead Developer
Responsibilities	Technical designing, architecting and development of the Android and iOS apps.
Description of Project	<p>Worked with phones sensors (Accelerometer, Gyroscope, Magnetometer, Proximity, GPS) and sensor based APIs (Activity recognition and Geo-fence) to develop algorithms for detection of following driving events. The work involved the collection and processing of all the sensor data at high frequency on the phone and sending this data to backend servers via webservices for further processing. It also involves analysing this sensor data on the backend servers and improving the algorithms to do better and efficient event detection on the phones. All this work feeds into many Allstate Auto Insurance Mobile Apps (Drivewise, Milewise, Pay as you use, etc).</p> <p>Driving events</p> <ul style="list-style-type: none"> • Automatic detection of drive start/stop location and time (detected using Activity Recognition, Geo-fence, GPS). • Distracted driving (due to calls, SMS, app/phone usage (detected using gyroscope, proximity, touch APIs). • Accurate driving mileage tracking (using Google snap to road API) • Hard cornering/turning (detected using gyroscope and GPS). • Hard braking (detected using accelerometer and GPS). • Hard acceleration (detected using accelerometer and GPS). • Severe crash detection (detected using gyroscope, accelerometer and GPS).

Project Name	Realtime driving alert application (Android Phone, Android Auto, Android Watch)
Client	Allstate (Chicago, United States)
Employer	Creospan (Chicago, United States)
Duration	6 months (Nov 2014 till April 2015)
Technology & Tools Used	Android, Java, Kotlin, iOS, Swift, Objective C, Android studio, Xcode, RESTful web APIs, JSON
Roles	Lead Developer
Responsibilities	Technical designing, architecting and development of the Android and iOS apps.
Description of Project	<p>We developed realtime alerts driving application for Android Phone, Android Auto and Android watch, which will alert the user with audio and visual messages (UI and Local notification) for any of the following alerts. The application makes use of GPS and various data sources (Inrix, Google places and road APIs) to provide the alerts information to the user while they are driving. Users can customize the type and format of alerts to be received. The alerts were displayed on both Android Audio and Android watch the using Car Extender and Notification APIs.</p> <p>Realtime Driving Alerts</p> <ul style="list-style-type: none"> • Over speeding alert (Google road API integration)

VARUN NAGPAL

Website: www.VarunNagpal.com

Phone: +1 416 799 9223

	<ul style="list-style-type: none"> • Speed limit change Alert (Google road API integration) • School zone alert (Google places API integration) • No honking zone (Schools, places of worship, using Google places APIs) • Severe weather alert (Nova and Inrix SDK integration) • Accident prone area alert (Inrix SDK integration) • Black ice alert (Inrix SDK integration) • Traffic congestion alert (Inrix SDK integration) • Distracted driving due to phone (Phone usage and handling at high speed) • Hard braking alert (using algorithm) • High speed alert (using algorithm) • High acceleration alert (using algorithm)
--	---

Project Name	Allstate Consumer Apps (Android and iOS)
Client	Allstate (Chicago, United States)
Employer	Creospan (Chicago, United States)
Duration	8 months (March 2014 till Oct 2014)
Technology & Tools Used	Android, Java, Kotlin, iOS, Swift, Objective C, Android studio, Xcode
Roles	Mobile Architect
Responsibilities	Review and approval of requirements, technical design documents and code reviews. POC/Prototyping of new features of the apps and new enterprise systems integrations. Creation of conceptual architecture documents/diagrams for new enterprise system integrations and new client features.
Description of Project	The project involved the new integration of Allstate Digital Locker apps and Allstate GoodHand Roadside apps with the Allstate main consumer apps, along with addition of new features. This involved modification of the code for the Allstate consumer apps to accommodate new features and building new integrations with Allstate internal enterprise systems like Claims, ICS (Integrated Customer Service), Billings, IDM (Identity Management System), etc. It also involved the addition of new features to consumer apps, like new Passbook iOS App integration, Parking Locator, Gas Finder, view offline auto id cards and policy pdf documents on the device. Integration with third party vendors sdk and features, like Google Analytics, Site Catalyst, X+1 Ads SDK, Nina Voice SDK, True Car, Safelite, etc. We also added addition security and PCI compliance modules, like certificate pinning, code obfuscation, encryption and decryption, seed/key being store on the server side.
App Store URLs	<p>Allstate Consumer Apps https://play.google.com/store/apps/details?id=com.allstate.view https://itunes.apple.com/us/app/allstatesm-mobile/id364376344?mt=8</p> <p>Digital Lockers Apps https://play.google.com/store/apps/details?id=com.allstate.digitallocker https://itunes.apple.com/us/app/allstate-digital-locker/id330304485?mt=8</p> <p>Good Hand Road Side Apps https://play.google.com/store/apps/details?id=com.allstate.ghr https://itunes.apple.com/us/app/good-hands-roadside-assistance/id400267333?mt=8</p>

Project Name	Site Acquisition Cross Platform Tool Mobile App for AT&T
Client	AT&T (Chicago, United States)
Employer	Creospan (Chicago, United States)
Duration	3 months (Jan 2014 till March 2014)
Technology & Tools Used	Phonogap/Cordova, HTML5, JavaScript, CSS3, Foundation and Knockout.js JavaScript Frameworks, Android and iOS Native Plugins.
Roles	Technical Consultant and Lead Developer
Responsibilities	Requirement Gathering and Analysis, Documentation (SRS and HLD) and building the prototype/base version for tool.
Description of Project	Site acquisition is cross platform mobile application in HTML5, JavaScript, CSS3 and Cordova/Phonogap for Android and iOS Platform. This application works both on

VARUN NAGPALWebsite: www.VarunNagpal.com

Phone: +1 416 799 9223

	online and offline mode. It captures the site information for field agents on the field and saves them on the devices and syncs with the backend, once the internet is available. Site information to be captured is configured from the backend and pushed to the client, via web services. The application uses device APIs for capturing location, photos, direction information. This application is built to support the responsive web design using foundation RWD framework, which supports both Phones and Tablets of any size.
--	---

Project Name	MCQ Mobile Engine for Android and iOS using Parse.com as backend
Client	In House Projects
Employer	Rapidsoft Technologies
Roles	Technical Architect
Responsibilities	Design, Documentation (SRS and HLD) and Code Review and Developing POC/Prototype using Parse Restful API and Corona SDK
Duration	3 months (from Oct 2013 to Dec 2013) [Multiple/Overlapping projects at same time]
Technology & Tools Used	Corona SDK for Android and iOS, Parse Restful API and Parse Backend
Description of Project	MCQ Mobile Engine application is developed for Android and iOS platforms using Corona SDK. This application uses the Parse Restful API to fetch the MCQ from the Parse backend database. The application is highly configuration and managed dynamically from Parse backend. This application is used for MCQ practice for online competitive exams for any subject. All the MCQs are fetched from the Restful API and saved in the local database. It provides a simulated testing environment on Mobile Phone or Tablets.

Project Name	Nigerian Government Identity Card Issuance and Biometric Data Capture System, Nigerian Osun State Government House Enumeration Capture System
Client Visit	Visited Nigeria (Lagos) at client location for 3 weeks for requirement gathering and analysis in July 2013
Duration	5 months (from June 2013 to Oct 2013) [Multiple/Overlapping projects at same time]
Client	Chams PLC Nigeria (http://www.chamsplc.com/) (Nigeria)
Employer	Rapidsoft Technologies
Technology & Tools Used	Android, Web Technology (PHP/MYSQL), Desktop App in C#/.NET, Java, JSP, Tomcat
Roles	Technical Consultant
Responsibilities	Design & Documentation (SRS) and Architect Solution for Android House Enumeration mobile application.
Description of Project	Nigerian Government Identity Card Issuance and Biometric Data Capture System is the collection of distributed system, which captures and stores biometric data from different inputs (Desktop App in C#/.NET) and then uploads it to the central server, after running AFIS (automatic fingerprint identification system) on it. All the card and biometric information is stored on the central server, where a card issuance module connects to servers and then verifies and prints the identity cards. Nigerian Osun State Government House Enumeration is a real estate property data capture mobile field application on Android platform, which is use by field agents for capturing and uploading to real estate property information to the central server via webservices.

Project Name	Nandos eLearning Mobile Web App
Client	Nandos (South Africa) (http://www.nandos.com/)
Employer	Rapidsoft Technologies
Duration	6 months (from Dec 2012 to May 2013) [Multiple/Overlapping projects at same time]
Technology & Tools Used	HTML5, JavaScript, CSS3, jQueryMobile, Foundation, PHP, MySQL
Roles	Technical Architect
Responsibilities	Involved in the creation of SRS, HLD and DLD specification documents. Responsible for gathering the requirement from Client and providing the technical architecture and solution. Also developed the initial POC/Prototype for selecting between different RWD framework (Tweeter Bootstrap, jQueryMobile, Foundation, CSS3 Media Queries)

VARUN NAGPAL

Website: www.VarunNagpal.com

Phone: +1 416 799 9223

Description of Project	Nandos eLearning mobile web app is responsive online testing and training learning portal for their world-wide employees. Its build using jQuery Mobile and Responsive Foundation JavaScript framework. The Administrator can create training and testing modules and can add different type of content (data, images, videos) to it and can assign to different employees with specific dates and roles. The user/employees can take the training course and give the test. Based on the performance in the test, the user/employee has to reappear for the test or training.
-------------------------------	--

Project Name	Mobile Games in Android and iOS (Angry Blacks, Water Rings, Bubble Burst, Galaxy Fighter, Teeter, Labyrinth)
Client	Cramberry Games INC, (United States) and in House Projects/Games
Employer	Rapidsoft Technologies
Duration	6 months (From Dec 2012 to May 2013) [Multiple/Overlapping projects at same time]
Technology & Tools Used	Corona SDK for Android and iOS, Android AndEngine for Native Android
Roles	Technical Lead and Technical Architect
Responsibilities	Building a POC/prototype, Code Review and Mentoring of Games
Description of Project	Working closely with Cramberry Games Inc, to mentor and code review of mobile games for Android and iOS with Cross platform Corona SDK. Worked on multiple games, which involved, game physics, game animation and other game concepts. Few games are already uploaded to App Store and few are under development.
App Store URLs	https://itunes.apple.com/us/app/water-bubble-rings/id690028388?ls=1&mt=8 https://itunes.apple.com/us/app/ibubble-burst/id690034875?ls=1&mt=8 https://itunes.apple.com/us/app/teeter-labyrinth/id674605639?ls=1&mt=8 https://itunes.apple.com/us/app/labyrinth-maze-balls/id689709657?mt=8 https://itunes.apple.com/us/app/galaxy-fighter-save-the-world/id715027272?ls=1&mt=8 https://play.google.com/store/apps/details?id=com.css.teeterpro

Project Name	Real Estate Property Search Apps (Android, iOS, Blackberry) & Property Search web services
Employer/Client	Favista Real Estate Pvt Ltd (www.favista.com) (India)
Duration	8 months (from April 2012 to Nov 2012)
Technology & Tools Used	Java, AXIS2, Springs, Tomcat, Webservices, JDBC, SOAP, Android, iOS, Blackberry
Roles	Technical Lead
Responsibilities	Design, Architect & Development and Code Review of the end to end solution. Design, Architect & Development of backend server module. Design, Architect & Development of Apps for Android, iPhone, iPad and Blackberry.
Description of Project	Developed and Mentored the property search apps for Android, iOS and blackberry, which lets user search real estate properties, on Maps and based on various search filters. There is unique Augmented Reality feature implemented, which tells the user the properties in the nearby areas, along with the current distance from the property. Also developed and mentored the backend server in Tomcat using web services in AXIS2, Springs and JDBC, which will read the data from MySQL database and will provide the data to the Mobile Apps in the Soap messages through web services. Also developed and mentored Vastu Consultant apps in Android, iPhone & iPad.
App Store URLs	https://play.google.com/store/apps/details?id=com.favista.mobile https://appworld.blackberry.com/webstore/content/19752582/?lang=en

Project Name	Data Collector Android App and Data Collector Webservices
Client/Employer	Favista Real Estate Pvt Ltd (www.favista.com) (India)
Technology & Tools Used	Java, AXIS2, Springs, Tomcat, Webservices, JDBC, Android, XML, SOAP
Duration	8 months (from Aug 2011 to March 2012)
Roles	Technical Lead and Senior Developer
Responsibilities	Design, Architect & Development and Code Review of the end to end solution. Design, Architect & Development of backend server module. Design, Architect & Code Review

VARUN NAGPALWebsite: www.VarunNagpal.com

Phone: +1 416 799 9223

	of Apps for Android.
Description of Project	Data Collector Android App is a tool given to all the sales agents for collecting the real estate property data on the fly. This tool works both in online and offline mode, the user can save the data in the offline mode and when comes in online mode, then user can upload the data to backend server using webservices. Backend Server is integrated into property database and CRM. Backend server is developed in Tomcat using AXIS2 webservices and Springs & JDBC is using for MySQL database communication.

Project Name	Vcast Music On Demand (MOD) Apps on Android and Blackberry for Verizon
Client	Verizon, (United States) (www.verizonwireless.com)
Employer	Packet Video
Technology & Tools Used	Java, Android, Web services, XML, Eclipse 3.4, Android SDK 2.2
Duration	8 months (from Dec 2010 to July 2011)
Roles	Senior Developer
Responsibilities	Responsible for implementation of new APIs using Restful API and SAX parser. Implemented many screen UI and flow and integration with backend module. Changed many Static XML UI elements to dynamic code UI elements of many screens to adjust the UI to multiple handset screen size.
Description of Project	MOD (Music On Demand) is a Ring Tone, Ring Back Tone and MP3 on demand service android app called Vcast Music, which comes preloaded in all the Android and Blackberry Handsets sold by Verizon in the US Market. These apps have various features like downloading, purchasing, searching, Artist Alerts, Recommendations, playing the latest MP3, Ring Tones, Ring Back Tones. Both of apps implement the Restful APIs from the Verizon server.

Project Name	Facebook and Ebay Apps for Android Smart TV
Client	SiS (Silicon Integrated System), (Taiwan) (www.sis.com)
Employer	Aricent
Technology & Tools Used	Java, Android, Web services, XML, Eclipse 3.4, Android SDK 2.0, SiS Live TV Platform
Duration	9 months (from April 2010 to Nov 2010)
Roles	Senior Developer
Responsibilities	Responsible of creation of the DLD document and development of complete Ebay and Facebook Apps for Android Smart TV Platform. Implemented Restful Facebook and Ebay webservices. Implemented the UI for Multi Screens TV resolutions, ranging from 14" to 40" size.
Description of Project	Android Smart TV is dual platform which is runs Live TV and Android Applications in parallel. Our project involved building the desktop android environment and building the set of applications like Home Screen, Virtual Keyboard, Flow control and Data Sync, Facebook, Flickr, YouTube, Google Traffic, Google Finance, Ebay, Weather, Updates, Browser, settings, etc.

Project Name	Photo Edit and Browser Tool for Android
Client	In House Project
Employer	L&T Infotech (www.lntinfotech.com)
Technology & Tools Used	Android 1.1 SDK, Java, Eclipse
Duration	8 months (from Aug 2009 to March 2010)
Roles	Software Developer
Responsibilities	Did the initial self-learning of Android APIs and did the complete development of the application.
Description of Project	Photo Edit and Browser is an android application, which scans all the photos in the phone memory and SD Card and show them in grid or list, as thumbnails. User can select any photo and edit it (crop, decolorize and other similar affects). User can select multiple photos and can do a delete/copy all. It also allow user to send photos as email attachments.

VARUN NAGPALWebsite: www.VarunNagpal.com

Phone: +1 416 799 9223

Project Name	MOM-SPHINX (Minutes Of Meeting using Speech Recognition)
Client	In House Project (India)
Employer	L&T Infotech (www.lntinfotech.com)
Technology & Tools Used	Java, JSP, Servlets, MYSQL, Eclipse 3.4, Tomcat, Scripting
Duration	9 months (from Nov 2008 to July 2009)
Roles	Software Developer
Responsibilities	Did the initial study of sphinx-4 framework and created acoustic model and language model for it. Implemented a new approach based on unigram for keyword based conversion for higher accuracy. Developed the static search engine in java and dynamic search engine in JSP for keyword based search. Involved in the database and web portal design and implementation in JSP, Servlets and deployed in Tomcat.
Description of Project	Sphinx-4 is open source framework in java for speech to text conversion; it's speaker independent, pluggable, flexible and generic framework. We developed an online web portal for capturing MOM and converting it to the text using modified version of sphinx-4. It has various functionalities like search and key word based conversion for higher accuracy. We used JSP, Servlets for hosting sphinx-4 in Tomcat server.

Project Name	SEPA (Single European Payment Area) Message Validator
Client	Sydbank (Denmark) (http://www.sydbank.com/)
Employer	L&T Infotech
Technology & Tools Used	Core Java, Eclipse, Log4j, Star UML, XML SAX Parser APIs
Duration	1 year (from Nov 2007 to Oct 2008)
Roles	Software Developer
Responsibilities	Involved in the Creation of Requirements, HLD and DLD specification documents. Responsible for Design & Implementation of File parser and Rule parser modules. Implemented XML Parsing Modules using SAX Parser APIs.
Description of Project	The SEPA message Validator framework is a generic, flexible and pluggable framework that is used to validate xml files containing business transactions between banks as per the ISO 20022 standards. It does both technical as well as business validation against preconfigured rules and logs the results. Its consists of various components like File parser, Rules parser, Event Handler, Logging Module, Action components, Validation components etc.