## LALIT AGARWAL

+1-(519)-722-3110 agarwal.lalit91@gmail.com Toronto, Ontario

#### **OBJECTIVE**

I am a passionate software engineer with 5+ years of experience of developing robust code. I have experience working on both web and mobile app development projects using best software practices. For the past couple of years, I have been involved with delivering new features for Android apps. I am an enthusiastic team player and a deep creative thinker. I am seeking a Software development position where I can use my expertise and grow as a Software developer while finding efficient solutions to complex problems.

## **SUMMARY OF QUALIFICATIONS**

- Software development experience in application, Android and web development.
- · Proficient in programming in Java, PHP, SQL.
- Strong background in algorithms, data structures, cryptography, network security.
- Google certified Associate Android developer
- Possess excellent verbal and written communication skills.
- Proficient in mathematics and eligible to work in Canada.

## **TECHNICAL SKILLS**

- Programming Languages: Java, Kotlin, C++
- Web Development: HTML, CSS, JavaScript, jQuery, PHP, SQL
- Technologies: Android Studio, Android SDK, Espresso, RxJava, GraphQL, REST Api, Matlab, Postman, JIRA
- Databases: SQL, SQLite, Realm, Room
- · Version Control Systems: Git, SVN
- Operating Systems: MacOS, Windows 7/8, Linux

## **RELEVANT EXPERIENCE**

## Agile Software Engineer, TribalScale, Toronto, Canada

Jul/18 – Present

- Working on an Android media player app which has more than 2 million daily active users
- Use agile methodologies (Extreme programming) during the entire software development cycle including TDD, pair programming
- Incorporate architecture components and Google's best practices with data binding and dependency injection (Dagger2)

## Software Developer, TradeRev, Toronto, Canada

Oct/16 - Jun/18

- Delivered new features for both the TradeRev and Adesa Upstream Android apps which is used by thousands of users on a daily basis.
- Worked with the product, design and QA teams to refine requirements and prototypes according to the product roadmap.
- Developed an offline feature using Realm DB to allow users to use the Android app offline.
- Used MVP architecture with best software development practices.
- Wrote unit tests using Mockito and debugged critical application issues such as crashes, memory leaks and concurrency problems.
- Responsible for reviewing production issues, training junior Android developers.

## Research Associate, Technology Information, Forecasting and Assessment Council (TIFAC), India

Sep/13 - Jun/14

- Developed web-applications using PHP for use within the organization.
- Maintained network performance by network monitoring and analysis.

## Research Intern, Bell Labs Research, India

Jan/13 - Apr/13

- Conducted a research study to understand the concerns of Indian web users towards online advertising.
- Developed a tool using Java to gather the information of all online ads present in a given list of web URLs.
- Developed a selective ad-block plugin for Firefox browser using JavaScript to filter sensitive ads.

## Play-tester, MILLEE, CMU, USA

May/10 - Dec/10

- Conducted alpha and beta tests for educational mobile games.
- Managed content required for the game including voiceovers, XMLs etc.

#### **SELECTED PROJECTS**

- FireLock: An Android Lock library to allow developers to re-authenticate their users conveniently and securely.
- **FoodBox:** An Android app to allow users to keep a track of the food available in their fridge and use it up before it expires by sharing their food with other users.
- Ad Filter Browser Plugin- Developed a modified version of the popular AdBlock plus browser plugin for Firefox using JavaScript, which blocks online ads containing sensitive content.
- Ad-Extractor Tool- Implemented a Java tool to extract and identify the content of textual and image-based online ads present on a given list of web-pages using Selenium web-driver.
- **NGO Information Management Suite** Collaborated on building a web-based information management system for an NGO for cataloguing their work, evaluating the NGO and its employee's performance.
- **P2P File Transfer System-** Implemented a client-server implementation in C language which facilitates file sharing between clients of the same network.

#### **EDUCATION**

## **University of Waterloo, Canada**

Sept/14 - Aug/16

Master of Mathematics, Computer Science.

CGPA: 88.20/100

 Relevant Coursework: Introduction to Artificial Intelligence, Advanced Topics in HCI- Humans in the Loop Systems, Cloud Computing and Software Defined Networking.

# Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), India

Jul/09 – May/13 CGPA: 8.55/10

- Bachelor of Technology, Information and Communication technology (ICT).
- Relevant Coursework: Data Structures and Algorithms, Introduction to Graph theory, Operating System,
  Database Management System, Introduction to Cryptography, System and Network Security, Security
  Protocols, Network Protocols, Sensor Network Systems.

### **PUBLICATIONS**

- Ask me again but don't annoy me: Evaluating Re-authentication strategies for smartphones, SOUPS 2016
   Lalit Agarwal, Hassan Khan, Urs Hengartner, University of Waterloo, Canada
- Do Not Embarrass: Re-Examining User Concerns for Online Tracking and Advertising, SOUPS 2013
   Lalit Agarwal, Nisheeth Shrivastava, Sharad Jaiswal, Saurabh Panjwani, Bell Labs Research, Bangalore, India

## **ADDITIONAL EXPERIENCE**

- Graduate Student Ambassador, Computer Science Department, University of Waterloo, Canada
- · Teaching Assistant, Computer Security and Privacy, University of Waterloo, Canada
- Teaching Assistant, Algorithm Design and Data Abstraction, University of Waterloo, Canada
- Teaching Assistant, Designing Functional Programs, University of Waterloo, Canada