

# Irteza Arif

Software Engineer

2310 - 88 Ersekine Ave, Toronto, ON M4P 1Y3 | [iarif@uwaterloo.ca](mailto:iarif@uwaterloo.ca) | +1 (226) 750 6052

## TECHNICAL SKILLS

---

**Programming Languages:** Java, Python (expert), JavaScript, Bash (proficient), C#, C++, MATLAB, VHDL (prior experience)

**Web Technologies:** NodeJS, AngularJS, ReactJS, Flask

**Databases:** MySQL, Mongo

**Infrastructure:** Docker, Docker compose, Ansible, Jenkins

## PERSONAL PROJECTS

---

**Android Apps Contributed to:** Toronto Now, Tech Deals, Shopping Flyers Canada

**Github:** <https://github.com/iarif123>

**Portfolio:** <https://iarif123.github.io>

## WORK EXPERIENCE

---

### Software Engineer

**Index Exchange, Kitchener, Ontario**

*June 2016 – Present*

- Developed a full stack NodeJS application to automate client side header-tag wrapper configuration creation.
- Developed backend aggregation and insertion engines for ad impression stats for hourly and daily stats lookup
- Reduced API response time by implementing dynamic container deployments and load balancing with Nginx
- Reduced file distribution time across ad servers by implementing p2p/torrent protocols.

### Software Developer

**Bazaarvoice, Austin, Texas**

*Sept 2015 – Dec 2015*

- Reduced lookup time of catalog data by implementing an intermediary Mongo store to cache “high demand” data.
- Developed ETL routines and REST API and ETL jobs to load and access cached catalog data.
- Increased match accuracy of high demand data by implementing indexing based on decision tree learning.
- Reduced ETL time by implementing an algorithm based on semi-streamed index joins to maximize throughput.

### Application Developer

**Validus Research Inc., Waterloo, Ontario**

*Sept 2014 – Dec 2014*

- Wrote real-time revenue checker application using python and elastic search to query transaction logs.
- Reduced data aggregation time by developing algorithms to identify and remove redundant transaction data.
- Created a custom, single-page, responsive internal dashboard using Java, MongoDB and AngularJS.

### Web Developer

**Canadian Medical Protective Association, Ottawa, Ontario**

*Jan 2014 – April 2014*

- Developed java applets for a patient-physician web portal, to facilitate real time updates of patient data.
- Designed and implemented live chatting to facilitate real-time patient-physician networking.
- Reduced video playback latency by implementing resizable iframes while keeping UI integrity.

## EDUCATION

---

### Bachelor of Applied Science (BASc), Electrical and Computer Engineering,

University of Waterloo, Waterloo, Ontario

*Sept 2011 – Apr 2016*

#### Relevant Projects:

- Implemented Traveling Salesman Optimization Algorithms using Tabu Search, Simulated Annealing, Genetic Algorithms, Particle Swarm Optimization and Ant Colony Optimization
- Used Altera’s DE2 board to implement a simple WAV player
- Programmed LEGO Mindstorm NXT using C# to navigate through a maze