Nakash Ali

nakash.ali@uwaterloo.ca
+1 (226) 978 2536
http://www.nababwany.com

Computer Engineering
University of Waterloo

12 Barlow Road
Markham
ON, Canada
L3R 8A4

Skills Summary

- Several work terms and projects **in C/C++, C# and Java**; a strong understanding of **object oriented programming**
- Developed **web applications** using **MVC frameworks like Rails and ASP.NET;** Experience with **SQL and JavaScript**
- Numerous **leadership experiences** and **extracurricular involvement** resulting in **strong interpersonal skills**

Technical Skills

OOP:	*Web App Frameworks:*	*Database and Front-End:*	*App Development:*	*Others:*
C#	ASP.NET	SQL / T-SQL	Android Studio	Assembly
C / C++	Ruby on Rails	JavaScript / ExtJS / jQuery	Qt Framework	Shell Scripting
Java	Groovy on Grails	HTML 5 / CSS / Bootstrap	Eclipse IDE	MATLAB

Work Experience

Software Developer - Application Development - *The Nielsen Company, Markham*   **(May 2016 – Aug 2016)**
- **Developed a web app**, with **ASP.NET, ExtJS and MS SQL Server**, to improve Nielsen's data management software
- Performed **full stack development**, particularly using **SQL stored procedures** and **JavaScript** for the front-end
- Developed a **C# program** using **COM Interop** to import MS Excel charts into PowerPoint, saving 200 days of work
- Wrote **batch scripts** to interact with **SQL Servers** and load consumer databanks, thus **optimizing the UAT process**
- Learned about the **production of large-scale software** by working on several teams; **chaired a monthly meeting**

C# Software Developer - *Transnomis Solutions Inc., Toronto*   **(Sept 2015 – Dec 2015)**
- Developed a **web application from scratch**, for the online administration of road permits in Durham, Ontario
- Performed **full stack development** using **ASP.NET MVC** with **MS SQL Server**, **C#**, **and JavaScript/HTML/CSS**
- **Collaborated** with another teammate to implement **Instant AJAX Searching, SVG Editing and User Management**
- Performed thorough **testing** and **debugging,** resulting in a product ready for deployment

Program Developer - *Carleton University, Ottawa*   **(Jan 2015 – Apr 2015)**
- **Independently developed the GUI** of a hydrological-simulation software using **Qt with C++ and MVC architecture**
- Performed **debugging and testing, compiled a setup** for the software and **monitored its launch** at UBC

Customer Service and Corporate Intern - *Diamond Trust Bank, Kenya*   **(July 2013 – Aug 2013)**
- Developed communication skills by **serving customers** at a major branch and **writing corporate loan applications**

Projects - *http://www.nababwany.com/myprojects.html*

SpeakBack – *Speech Analysing Web Application (Ruby and Rails, HTML, JS, Shell)*   **(May 2016 – Present)**
- Software uses an **IBM Watson API** and **Praat phonetic analysis** to record speech and provide an intensity graph
- **Independently developed** the application to provide feedback on speech in order **to improve my teaching skills**
- **Programmed Praat and Shell scripts** to analyse audio and generate graphs; **wrote Ruby logic** to coordinate them
- **Developed an HTML 5 and JavaScript front-end** in order to provide an audio recording interface and show results

Price Estimator – *Web Application (Ruby on Rails)*   **(Sept 2015 – May 2016)**
- Application **developed using Rails** to estimate prices of used products, based on results from e-shopping websites
- Wrote **JavaScript to interact with e-shopping API's** and **Ruby algorithms to calculate an average price** based on how the API data matched the user's description of their product.

Independent Software Development using OOP – *with C# and C++*   **(Jan 2014 – Present)**
- Developed software for **database management**, **encoding/decoding** messages, **automation of data processing** through file IO streams, and for calculating Euler's approximations, using C++ and C# with OOP concepts
- Programmed C++ algorithms for management and traversal of various data structures like trees and hash tables

Web Development – *with Groovy on Grails, JavaScript, HTML/CSS and Sketch*   **(Jan 2013 – Present)**
- **Developed the UI, using Grails**, of an application to help schedule volunteering duties for my community
- Learned how to **design user interfaces using Sketch** and how to implement Sketch designs using **HTML / CSS**
- Designed an informational website for my philanthropic group (www.uhaimombasa.com) using **HTML / CSS**

Android Application Development – *Using Java, Android Studio and Eclipse*   **(Jan 2015 – May 2015)**
- Developed Android applications by writing **Java and XML,** using the Android Studio and Eclipse IDE's
- **Recorded sensor values** and **implemented filters and state machines** in order to develop a **pedometer**
- Coordinated with a teammate, using **Subclipse SVN**, to write **path-finding algorithms** and **create a navigator**

Digital Circuit Design and Logic Synthesis – *with VHDL and Quartus*   **(May 2015 – Present)**
- Designed hardware using **VHDL**, verified **RTL schematics** through simulation, and **programmed FPGAs** after the synthesis of the HDL design was completed in **Altera Quartus II**; rich understanding of hardware design
- Designed and Implemented **combinational and sequential circuits** to control cars and elevators

Co-Founded UHAI, Mombasa (Charitable Group)   **(Dec 2012 – May 2014)**
- **Worked with a team** of executive members to **engineer solutions** to problems in the developing world
- Implemented various **fund-raising techniques** to provide Pungu Primary School with **access to clean water**
- **Organized entertainment events** for the unfortunate within the community of Mombasa, such as orphans

Volunteering and Extracurricular Involvement

Religious Education Teacher at ITREB Canada *(community centre in Kitchener, Canada)*   **(Jan 2015 – Present)**
- Taught Year 3 students about religious traditions and helped promote religious and cultural pluralism within kids

Vice Chair of Waterloo Ismaili Students Association *(student community at UWaterloo)*   **(May 2015 – Aug 2015)**
- Helped run the executive committee in order to plan weekly bonding and entertainment events for club members

Model United Nations: **(Aug 2012 – Jan 2013)**
- Attended large-scale conferences to propose and debate about innovative solutions to global diplomatic issues

Dorm Captain at Aga Khan Academy, Mombasa: **(Apr 2013 – Apr 2014)**
- Led the students of my residential dorm by addressing their concerns and helping them achieve academic success
- Collaborated with other leaders to organize events for the residential community, fostering a family environment

Community Service and Event Organisation
- Created a presentation to help community executives plan Canada's sesquicentennial celebrations   (July 2016)
- Tutored Kenyan students in various subjects, boosting their academic progress   (Jan 2013 – Feb 2014)
- Organized and participated in an event to medically deworm children in rural Mombasa   (Sep 2012)
- Wrote articles to raise awareness about environmental issues in Kenya   (Aug 2012 – Jan 2013)
- Independently organized soccer and basketball tournaments for the youth in U.A.E   (2010 – 2011)

Bass Guitarist – 3 Piece *(rock band based in Waterloo, Canada)*   **(May 2015 – Present)**
- Performed at several community dance events and organized several musical events with the rest of band

'The Tribe' *(performing arts group based in Mombasa, Kenya)*   **(Aug 2012 – May 2014)**
- Performed at several concerts and large-scale events; won several competitions

Physical Education
- Played for the cricket, basketball, table-tennis and softball varsity teams in high school   (2008 – 2013)
- Climbed Mt. Kasigau (1600 meters) with a team for the Bronze President's Award expedition   (Feb 2013)

Awards and Scholarships
- A CAD 12,000 President's Scholarship to the University of Waterloo for academic excellence   (Apr 2014)
- MVP at the NSLC Conference for exceptional leadership, creativity and problem solving skill   (Jul 2013)

Education
- Candidate for BAS in Honours Computer Engineering at the University of Waterloo   (Sep 2014 – Present)
- International Baccalaureate Diploma from the Aga Khan Academy, Mombasa   (Aug 2012 – May 2014)

International Baccalaureate Diploma Projects
- Math Exploration: calculated the probability of winning Poker hands using conditional probability concepts
- Extended Essay: a research paper about the price elasticity of internet bandwidth in Mombasa's schools