

# Huzefa Fatakdwala

4A Computer Engineering  
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## PROGRAMMING

C • C++ • Java • Python  
C# • Lua • Tacc • VHDL  
Obj-C • Golang

## TECHNOLOGIES

Unity • win32 • linux • posix  
git • perforce • gcc • gdb  
Thrift • Hadoop • ZooKeeper

## EDUCATION

UNIVERSITY OF WATERLOO  
B.A.Sc IN COMPUTER ENGINEERING  
In Progress (2017) | Waterloo, ON

## ASSIGNMENTS

### DISTRIBUTED KEY VALUE STORE

Used Apache Thrift to make IPC calls that kept all storage nodes consistent and partitioned data correctly.

### KIRSCH EDGE DETECTOR

Wrote VHDL code to generate hardware on an FPGA that detected all edges in an image.

### CIRCULAR QUEUE

An extremely robust implementation of a circular queue written in C and used by multiple groups as part of their project.

## COURSEWORK

Distributed Systems  
Cooperative and Adaptive Algorithms  
Introduction to Compilers  
Computer Networks  
Operating Systems  
Algorithms and Data Structures  
Database Systems  
Communication Theory

## LINKS

Github:// chromozonex  
LinkedIn:// huzefa

## EXPERIENCE

### AMAZON | SOFTWARE ENGINEER INTERN

Sep 2016 - Present | Seattle, WA  
• Worked on projects at Amazon Search.

### MICROSOFT | SOFTWARE ENGINEER INTERN

Jan 2016 - Apr 2016 | Vancouver, BC  
• Worked with the Prototypes team to determine technological feasibility of potential first party applications for Windows devices such as the Hololens.  
• Contributed to next generation technologies for content consumption of 3D experiences on all Windows platforms.

### ARISTA NETWORKS | SOFTWARE ENGINEER INTERN

May 2015 - Aug 2015 | Santa Clara, CA  
• Designed a feature that allows a user to attach and apply a PBR policy on an interface that is not part of the default VRF.  
• Implemented VRF leaking through use of PBR which allows setting a nexthop address outside of the current VRF.

### APPZERO SOFTWARE | SOFTWARE DEVELOPER INTERN

Sep 2014 - Dec 2014 | Ottawa, ON  
• Designed feature to separate out DCOM registry keys being dissolved.  
• Fixed a bug to correctly handle reparse points during application migrations.

### CRANK SOFTWARE | SOFTWARE DEVELOPER INTERN

Jan 2014 - Apr 2014 | Ottawa, ON  
• Designed a native MacOS implementation of the Storyboard runtime using OpenGL rendering technologies.  
• Designed and implemented a multiplatform stand-alone launcher for applications created with the Storyboard Designer Tool.

### CRANK SOFTWARE | SOFTWARE DEVELOPER INTERN

May 2013 - Aug 2013 | Ottawa, ON  
• Worked on porting the Storyboard Engine from FreeRTOS to SafeRTOS. Used an embedded board (NXP LPC17xx) for testing the engine.  
• Implemented automated testing of Storyboard Engine on embedded targets such as Texas Instruments AM335x running Linux and QNX.

## PROJECTS

### MUSIC SYNCHRONIZER | ANDROID APP FOR HACK THE NORTH

Sep 2015 | Waterloo, ON  
Identifies the song being played using sound waves recorded by the mic and attempts to play the same song on the current device in sync with the music.

### UW MICRO AERIAL VEHICLES TEAM | SOFTWARE LEAD

May 2013 - Dec 2014 | Waterloo, ON  
Analyzed images on an odroid-xu running Ubuntu using the OpenCV framework. Also installed and calibrated SONAR to implement altitude-hold.