

VARUN GUPTA

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SKILLS

Languages

Python
C++
Java
Swift
JavaScript
HTML/CSS
Bash
SQL
Scala
Objective-C
VB.NET

Mobile Dev

iOS
Android

EDUCATION

University of Waterloo

Sept 2015 - Apr 2020
Candidate for Bachelor of
Software Engineering
Cumulative GPA: 3.9
(89.3%).

AWARDS

Dean's Honour List

University of Waterloo
Dec 2018

Achieved Dean's Honour
List for the 1A, 1B, 2A,
3A, and 3B terms.

Governor General's Bronze Medal

Governor General of
Canada
Oct 2015

Top grade 12 average
(97.7%) in high school.

Honour Roll in Canadian Computing Contest

University of Waterloo
Feb 2015

Top 3% of contestants.

EXPERIENCE

Nvidia | *Software Intern*

Champaign, Illinois

Jan 2019 - Apr 2019

- Accelerated GPU health check speed by up to 3x on faulty GPUs and increased maintainability by refactoring active health tools.
- Increased GPU health check accuracy and reduced rate of false failures by ignoring user specified throttling errors.
- Redesigned reporting framework to clearly highlight GPU errors for easier remediation.

C++, Python

SideFX Software | *Python Developer*

Toronto, Ontario

May 2018 - Aug 2018

- Reduced load times by up to 3x and data file sizes by up to 30x using lazy loading and Blosc compression in Houdini's Pose Library.
- Added support for custom resource tracking to HQueue, a job scheduler to run rendering jobs on a compute farm.
- Improved HQueue load balancing by using AWS EC2 for adding client machines on demand to reduce job turnaround times during peak load.

Python, Qt5, C++

Intel | *Software Engineer*

Toronto, Ontario

Sept 2017 - Dec 2017

- Improved High-Performance Computing (HPC) farm compatibility in Quartus Design Space Explorer (DSE II) by adding support for the Torque scheduler.
- Proposed and implemented a project to add support for cloud providers in DSE II, reducing setup time by up to 10x and improving UX.
- Automated packaging of test framework for validating Quartus images, reducing package creation time from 15 minutes to 2 minutes.

Python (Flask), Perl

Accedo | *Jr Software Engineer*

Toronto, Ontario

Jan 2017 - Apr 2017

- Implemented free previews of paid content and live TV stream functionality for several Apple TV apps.
- Designed and implemented an app which allows an Apple Watch to provide playback controls for an Apple TV.

Swift, RxSwift (ReactiveX)

Qualicom Innovations | *Mobile Developer Co-op*

North York, Ontario

May 2016 - Aug 2016

- Optimized number of server data requests to reduce page render latency by up to 10 seconds in an iOS sales app.
- Automated Linux server setup and migration of a Django web app via bash scripts.

Swift, Java (Android), Python, Objective-C

PROJECTS

FF Enhancer (bit.ly/2N0B33S)

Dec 2017

- A Chrome extension that enables advanced story filtering on www.fanfiction.net.

JavaScript, HTML, CSS