VARUN GUPTA
3B SOFTWARE ENGINEERING

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✚ SKILLS

LANGUAGES
Python
C++
Swift (iOS)
Java (Android)
Bash
JavaScript
Scala
SQL
Objective-C
HTML/CSS
VB.NET

TOOLS
PyCharm
XCode
Android Studio
Eclipse
Visual Studio
Git / Subversion
JIRA

✚ EDUCATION

University of Waterloo
Candidate for Bachelor of Software Engineering Apr 2020 (Expected)
Cumulative GPA: 3.9 (89.8%).

✚ AWARDS

Dean's Honour List
University of Waterloo
Dec. 2016

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

SideFX - *Python Developer*   May 2018 - Aug. 2018
Toronto, Ontario
- Added features such as support for custom resources to HQueue, which is a batch job system for concurrently running render jobs on a compute farm.
- Improved HQueue load balancing by using cloud computing (Amazon EC2) to add client machines on demand to reduce job turnaround time during periods of high load.
- Revamped Houdini's Pose Library infrastructure, leading to a performance boost by up to 3x for large libraries.
- Reduced files sizes of Pose Library data files by up to 30x by implementing support for a compressed binary format.

Python, Qt5, C++

Intel Corp. - *Software Engineer - PEY/Intern*   Sept. 2017 - Dec. 2017
Toronto, Ontario
- Added features and improved High-Performance Computing (HPC) farm support for Intel Quartus Design Space Explorer (DSE II).
- Proposed and implemented a project to improve DSE II functionality with cloud providers, reducing setup time by up to 10x and improving user experience.
- Automated packaging of test framework for validating Quartus images on Nimbix and Microsoft Azure, reducing packaging time from 15 minutes to 2 minutes.

Python (Flask), Bash, some Perl

Accedo (Digiflare Inc.) - *Jr Software Engineer*   Jan. 2017 - Apr. 2017
Toronto, Ontario
- Implemented premium content preview and live TV page functionality for various Apple TV media apps.
- Utilized dependency injection and software design patterns to ensure modularity and testability of code.
- Designed and implemented an app allowing the Apple TV and Apple Watch to communicate over the local network.

Swift, RxSwift (ReactiveX)

Qualicom Innovations Inc. - *Mobile Developer Co-op*   May 2016 - Aug. 2016
North York, Ontario
- Optimized server data requests, improving response times by 7 - 10 seconds in an iOS sales app.
- Implemented dynamic layouts for different screen sizes in Android shopping apps.
- Automated Linux server setup and migration of a Django web app via bash scripts.

Swift, Java, Python, some Objective-C

✚ PROJECTS

The Flying Stickman (bit.ly/2O5wyda)   June 2015 - Jan. 2016
- A fly-and-shoot arcade game which uses OOP principles to model game entities and behaviours such as enemies, projectiles, and health.

Java (Android)

FF Enhancer (bit.ly/2N0B33S)   Dec. 2017
- A Chrome extension that allows for advanced story filtering on www.fanfiction.net.

JavaScript, HTML, CSS