VARUN GUPTA

2A SOFTWARE ENGINEERING

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+ TECHNICAL SKILLS

LANGUAGES: Java (Android), Swift (iOS), C++, C, VB.NET, Python
FAMILIAR WITH: PHP, Bash, Objective-C, Scala, HTML, CSS, SQL, Sikuli X
TOOLS: Android Studio, XCode 7, Eclipse, Visual Studio, GitHub, Energia IDE (Embedded C)

+ EXPERIENCE

Qualicom Innovations Inc. - *Mobile Developer Co-op*
May 2016 to Aug 2016
North York, Ontario

- iOS (Swift + some Objective-C) app development - added new features such as PDF document e-signing for sold units using PSPDFKit and a grid view layout using UICollectionView.
- Optimized server data requests, led to performance improvement of 7 - 10 seconds while displaying list of available units.
- Android app development for online shopping apps - implemented new features such as a fashion mode for item browsing and dynamic layouts for different screen sizes.
- Migrated Django (Python) web application and set up a Linux development server for the web application.
- Authored documentation and created several Linux shell scripts to automate migration steps which reduced downtime during the migration process.
- Created Python scripts for test automation with Sikuli X and Robot Framework

Shivom Computer and Graphics - *Computer Technician*
2010 to 2015
Mississauga, Ontario

- Diagnosed and replaced hardware such as LCD screens, DC jacks, and motherboards.
- Resolved software issues (Windows, OSX) such as BSODs, kernel panics, and networking issues.
- Developed strong communication skills by attending to customer concerns and needs.

+ PROJECTS

The Flying Stickman (Android) | Jun 2015 - Jan 2016
goo.gl/h7KNF7

- A fly-and-shoot game optimized for different screen sizes and resolutions.
- Used OOP principles to model game entities and behaviours such as enemies, projectiles, and health.
- Debugged any bugs found through user testing via the Eclipse debugger after each update.

Geese Invaders (C) | Oct 2015 - Nov 2015

- Collaborated with 4 colleagues to make a space invaders game for the Tiva C LaunchPad microcontroller using Energia (Embedded C IDE).
- Utilized sensors such as a potentiometer and an accelerometer to control gun position, speed, and other game elements.

Blackjack (VB.NET) | May 2014 - Jun 2014

- Single player blackjack game with dealer AI and custom bets.
- Dealer AI conforms to blackjack rules using extensive decision structures and runtime variables.
- Robust design - can handle invalid user input.

Concentration (VB.NET) | Apr 2014 - May 2014

- Two player concentration game with up to 15 cards.
- Options for player names and number of cards each round.
- Implemented algorithms to generate VB PictureBox objects dynamically each round, display random cards with no repeats, and parse player-selected cards for match testing.

+ EDUCATION

University of Waterloo
Candidate for Bachelor of Software Engineering
2020
First Year GPA: 3.94 (92.5%). Currently building an assembler (MIPS ISA) and compiler in CS241E with Scala

+ AWARDS

Dean's Honour List
Apr 2016
University of Waterloo
Dean's Honour List recipient for both terms in first year.

Governor General's Bronze Medal
Oct 2015
Governor General of Canada
Ontario's Top Scholar List - 97.7% overall grade 12 average.

Honour Roll in Canadian Computing Contest
Feb 2015
University of Waterloo
Strong problem solving skills in programming challenges.

+ ACTIVITIES & INTERESTS

- Writing scripts to automate repetitive tasks.
- Playing sports such as Ultimate Frisbee, badminton, and soccer.
- Reading about new scientific discoveries and advancements.
- Watching new episodes of The Flash, Arrow, and Sherlock.