

VARUN GUPTA

1B SOFTWARE ENGINEERING | STUDENT ID#: 20617394

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SUMMARY

- Proficient in Java, C/C++, and VB.NET, including data structures, testing, and debugging code (via courses and projects).
- Mobile development experience via an independent Android game (published on the Play store).
- Five years of computer / laptop repair and troubleshooting experience.
- Excellent Microsoft Office skills (Excel, Word, PowerPoint).
- Strong communication, time management, and teamwork skills developed through volunteer experience and extracurricular activities.
- Motivated, versatile, and enthusiastic programmer.

PROJECTS

The Flying Stickman (Android / Java) | Jun 2015 - Jan 2016

A fly-and-shoot game optimized for different screen sizes and resolutions. OOP principles used to model game entities and behaviours such as enemies, projectiles, speed, and health. Debugged any bugs found through user testing using the Eclipse debugger after each update. Published on the Play store under the developer name "A13".

Geese Invaders (C) | Oct 2015 - Nov 2015

Collaborated with a group of 4 colleagues to make a space invaders type game for the Tiva C Series LaunchPad microcontroller and Orbit Booster Pack using the Energia IDE (Embedded C). Implemented data structures to keep track of a gun, bullets, and geese, and utilized them to perform collision testing as well as game loop updates. Utilized sensors such as potentiometers, switches, and an accelerometer to control gun position, speed, and other game elements.

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

One player blackjack game with an AI dealer, custom bets, and animation. Dealer AI conforms to blackjack rules using extensive decision structures and values of runtime variables (i.e. the cards dealt). Game designed to be robust and is designed to handle invalid user input such as negative bets.

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

Two player, turn based concentration game with up to 15 cards. Players can enter their names and choose number of cards every round. Complex algorithms implemented to generate VB PictureBox objects dynamically each round, display randomly generated cards with no repeats, and parse player-selected cards for match testing.

SKILLS

PROFICIENT IN: Java, C, C++, VB.NET

FAMILIAR WITH: HTML, PHP, CSS, SQL

TOOLS: Visual Studio, Eclipse (Java), Eclipse CDT (C/C++), GitHub (Git), Energia IDE(Embedded C), Photoshop

ADDITIONAL EXPERIENCE

Shivom Computer and Graphics 2010 to 2015 Computer Technician

Responsibilities: Attend to service calls, diagnose and repair customer devices, provide customer support for computer setup.

Achievements: Quickly grasped troubleshooting concepts and procedures for repairing devices. Diagnosed and replaced hardware including LCD screens, laptop keyboards, DC jacks, motherboards. Resolved software problems (Windows and OSX) including BSODs, kernel panics, malwares / viruses, and networking issues. Developed strong communication skills by attending to customer concerns and needs.

IBT Team (Gordon Graydon Memorial SS Club) 2014 to 2015

Web & Tech Manager

Collaborated with a team of Web Managers to add, update, remove events, news items, and other content on the IBT website (using HTML, CSS, and PHP).

AWARDS

Governor's General 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.

EDUCATION

University of Waterloo

Candidate for Bachelor of Software Engineering 2020
First Term (1A) cumulative average: 93%. Currently learning encapsulation, abstract data types, stacks, linked lists, and memory models.