

# Navjot Panesar

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2A Computer Engineering  
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NavjotPanesar.com  
Github.com/NavjotPanesar

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## Summary of Qualifications:

- Proficient in C#, C++, Java, Android, Python.
- Experienced with JavaScript, NodeJS, PHP and ASP.NET web development
- Comfortable with test driven development, unit testing, and Linux based operating systems
- Able to collaborate with coworkers to overcome difficult tasks and debugging

## Work:

Pivotal Labs  
Agile Engineering  
Co-op Placement  
2014

- Collaborated via pair programming to create Android applications in Java
- Effective use of tools such as Android Studio, Eclipse, Gradle, and Travis to write and deploy maintainable code quickly
- Employed troubleshooting techniques such as analyzing open source code and pair programming

BlackBerry  
Software Tools  
Co-op Placement  
2014

- Wrote and maintained web tools in a collaborative environment using ASP.NET with JQuery and SQL
- Creation of libraries for automated battery life testing in python
- Investigated and resolved new tickets for bug fixes and feature requests using Git, Perforce, and SourceSafe for source control

EnableTC  
Co-op Placement  
2012

- Built National Instruments Week robot in a group using Lego robotics kits
- Applied a systematic design process to create an interactive game that could safely be shipped across the continent for display
- Assisted with editing and filming of educational tutorial videos

## Projects:

Doge Bot  
Python Twitter Bot  
2014 - 2015

- Open source twitter bot infrastructure; written in python and allows for custom plugins
- Custom analytics reporting to create graphs and reports in NodeJS
- Employed unit testing and automated builds to speed up development
- Usage instructions and source found at (NavjotPanesar.com/dogebot)

Oculus Frogger  
Virtual reality game  
2014

- Remake of Frogger in Unity3D engine with support for oculus rift
- Took on a leadership role amongst three other engineers after work hours
- Integrated Leap Motion to allow player to use their hands as input
- Dynamic vehicle generation, realistic physics and collision detection

NavjotPanesar.com  
Personal Website  
2014

- Created using PHP, SQL, and twitter's bootstrap for mobile optimization
- MVC web application structure
- Hosts my screenshot gallery as well as other projects
- Custom flash player page, with loading progress bars in JavaScript

IRCu  
Android Application  
2014

- Independent side project using the Android lollipop SDK
- Aimed to be a simple, uncluttered Internet Relay Chat client
- Has the ability to switch channels that reside on different servers on the fly

### Relevant Assignments:

Price of Power  
Computer Science  
2012

- Final project for grade 12 computer science course, physics based game in Flash available for play on personal website (NavjotPanesar.com/projects)
- Designed three types of enemies with unique artificial intelligences
- Developed game engine with realistic run, jump, and projectile physics
- Formatted to play on the Blackberry Playbook

Zombie Defence  
Computer Science  
2011

- Final game for grade 11 computer science course
- Path finding artificial intelligence that allows enemies to seek out the main player
- Multiple weapons, enemies, and an in game shop

### Volunteer:

Robotics Challenge  
Bishop Reding School  
2010

- Taught programming concepts to elementary school students
- Organized and supervised daily activities
- Assisted with the creation of challenging tasks for competitors

Peer Tutoring  
Bishop Reding School  
2011 - 2013

- Tutored students in advanced functions and physics
- Developed techniques to be able to engage with others to better communicate information