# **Jagger Nast**

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### Skills

- Languages: C, C++, C#, Python, Javascript, SQL, CSS, HTML5, R
- · Libraries: Django, JQuery, Bootstrap, Android SDK
- Software: git, Unity 3D, MySQL, SQLite3, Eclipse
- · Creative, strong problem solver, excellent communication skills

# **Work Experience**

# Game Developer (Co-op)

The Games Institute (University of Waterloo)

May 2015 - Aug 2015

- Developed and released Quantum Cats mobile game
- Led development on Alice and Schrodinger mobile self-guided tour
- Incorporated play-test feedback
- Prototyped and tested multiple game-play loops and mechanics
- Followed an agile development paradigm
- Led and participated in regular scrums
- Performed several iterations over game-play mechanics
- Released final product ahead of schedule
- Created interesting and rewarding game-play loop
- Quantum Cats received over 5000 downloads
- Integrated NFC and iBeacon functionality into mobile app
- Learned and produced game in C# in less than 4 months
- · Contributed to all aspects of final product

### Web Developer (Co-op)

Science Computing (University of Waterloo)

July 2014 - Dec 2014

- Primary developer for online test creation and evaluation suite
- Test Management suite now in use by several faculties on campus
- Designed and implemented project framework
- Incorporated independent authentication service
- Implemented prototype test results and feedback
- Presented development process to invested parties
- Advised supervisors on future design directions
- Created developer tools for database management
- Self-taught and produced results in Django, Javascript, SQL in less than 4 months

# **Co-op Content Developer**

Math Faculty Computing Facility

Sept 2014 - Dec 2014

- Exposed previously unknown functionality of code base to supervisors
- Participated and led weekly scrums
- Created varied tests to target specific areas of knowledge
- Developed content for Maple TA student self-directed study service
- Provided feedback to supervisors regarding content presentation
- Incorporated test feedback

# Volleyball Coach

Ottawa Fusion Volleyball Club

Sept 2008 - May 2011

- Coached ages 8 to 15 in volleyball fundamentals
- Shared fundamental concepts such that they were understood by all
- · Worked with athletes on an individual basis to ensure understanding
- Taught fellow coaches best practices
- · Won coach of the year on several occasions
- Assisted athletes in overcoming weaknesses

# **Education**

# **Bachelor Degree: Honours Applied Mathematics**

Sept 2011 - Jan 2015

University of Waterloo

Relevant Courses

- Object Oriented Programming and Design Patterns
- Database Design and Application
- Memory management and Programming Best Practices
- Low-level Functionality of Computers and Stability Concerns

#### **Interests**

#### **Projects**

Source code available at https://github.com/jcnast

- Dungeon Crawl clone written in C++
- Endless vertical scroller with complete AI
- Turn based tactical 2D army command game
- Multiplayer co-operative bullet hell
- Modelling of interpersonal relationships of a population using Unity 3D and SQL
- Django web application for musicians to share music with fans

#### **Hobbies**

- Gaming of all sorts
- Personal improvement (fitness, self-eduction)
- Volleyball (varsity)
- Incorporating technology to make life more efficient