

# Rajan Jassal

Edmonton, AB rkjassal@ualberta.ca

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## Highlights of Qualifications

- Experience working in small project teams in order to complete software development projects using Agile practices
- Robust object-oriented design skills having used object-orientated languages and design patterns to create multiple projects including an Android application
- Comprehensive web development abilities having used a wide variety of tools and frameworks to develop multiple websites
- Aptitude and proficiency in self-teaching new computer technologies by having self-taught a magnitude of different programming languages and technologies
- Strong understanding of unit testing and test driven development having worked on multiple projects where testing was a necessity
- Computer security enthusiast who keeps current with cybersecurity trends in the industry

## Education

### **BSc in Computer Engineering**

**2012- 2016**

University of Alberta, Edmonton, AB

- GPA: 3.4/4.0 in final year
- Key Electives: Reliable Secure System Design, Object Oriented Software, Introduction to Software Engineering, Introduction to File and Database Management, Intelligent Systems
- Capstone project: A gesture tracking glove that was able to successfully identify linear gestures and then execute keyboard shortcuts on a Windows computer

### **High School Diploma**

**2009- 2012**

W.P Wagner, Edmonton, AB

- Honors award- Grade 10, 11 and 12
- Advance Placement award- Calculus

## Design Projects

- Created an Android application in a small team of six people using a combination of Agile software development principles, object-oriented design, version control, elastic search, unit testing and test driven development
- Developed a web-based database application using HTML, CSS, JavaScript, jQuery, and PHP. Using SQL queries and an Oracle database, a web-based application was created that allowed users to log in and perform various actions on stored data
- Designed a program in Python that would learn a valid policy for playing blackjack using reinforcement learning
- Programmed a parallel/distributed implementation of the PageRank algorithm using MPI
- Implemented a website using a combination of HTML, CSS, and JavaScript that executed web development code inputted into a browser
- Developed a server and client in Java that communicated securely through the use of a Feistel block cipher
- Created a responsive portfolio website using Bootstrap. Available to view at: <http://rkj777.github.io>
- Projects available to view at <https://github.com/rkj777>

## **Technology Summary**

- Programming languages: Java, C, C#, JavaScript, Python, RISC Assembly, PHP, Lisp, and Prolog
- Strong object-oriented design skills
- Experience with markup languages such as XML and HTML
- Web development skills with HTML, CSS, PHP, SQL, JavaScript, JSON, jQuery and Bootstrap
- Experience with Android mobile development. Skill with working in both Eclipse and Android Studio
- Parallel programming knowledge having worked with Pthreads, OpenMP, and MPI
- Skill using Git and GitHub for version control
- Ability to work in a Unix/Linux based terminal
- Familiarity with Windows, OS X, and Linux

## **Work Experience**

### **Web Developer**

**August 2016-Present**

Gemini Bridal, Edmonton AB

- Worked primarily at the back-end, preparing website data and migrating it to a SQL database.
- Automated major portions of data entry tasks through the use of scripting. Automation scripts created led to a 50% speed increase for data entry tasks that were previously done manually.
- Crafted and implemented search engine optimization(SEO) action plans in order to increase website traffic
- Using a combination of the Python Imaging library(PIL) and optical character recognition(OCR) through the use of Google's tesseract library, successfully automated a number of image processing tasks involving splitting and classifying dress images.

### **Warehouse Employee**

**2013**

IPEX, Edmonton AB

- Required to think in creative ways in order to utilized limited time and resources to complete orders by a given deadline
- Gained vital communication and interpersonal skills in order to work effectively in a positive team environment
- Worked under pressure and managed time efficiently
- Collaborated with team members to complete orders on time and accurately

## **Additional Information**

- Registered Engineer-In-Training with APEGA
- Complete Rutherford scholarship- 2010, 2011 and 2012
- Completed the CSTS-09 online safety course provided by ACSA
- Holds a class 5 driver's license and has full-time access to a vehicle
- Volunteered with the big brother and sisters program by sending emails to children living in underdeveloped parts of town
- Fluent in written and verbal English

## **Hobbies**

- Competing in coding competitions and hackathons
- Creating small Android applications
- Building and upgrading computers
- Taking online courses on websites such as Udacity and Udemy

## **References**

- References available upon request