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Work Experience

Natural Resources Canada – Northern Forestry Centre – Edmonton, AB

Jan 2017 – Mar 2017, **Android Development Contract**

Worked as a contractor, designing and developing two Android apps for the Carbon Accounting Team

- Sole developer of an Android app for a scientific publication, including reference, data entry, and calculation functions. Took requirements for, designed, and programmed the app
- Wrote tools in C++ and Python to convert a 1980's vintage taxonomic classification program written for Classic Mac systems to a modern format. Then created web and Android app versions of the converted application

Roblox Corporation – San Mateo, California

Roblox Corporation is a game company that develops and manages a game engine and social media site with more than 20 million monthly active users who can play and create games on the platform

Summer 2014, **8 Month Internship**

Junior programmer on the Content Team

- Designed, developed, and released a flagship mobile game using the platform as part of a 5 person team. Total project size of around 50,000 lines of code
- Designed and wrote 3D-modeling plugins for the engine to enhance developer productivity

Summer 2013, **4 Month Internship**

Junior programmer on the Content Team

- Developed a game for the Roblox platform on a 3 person team, including writing efficient real-time voxel-based pathfinding AI
- Developed content releases in Lua on a tight weekly schedule
- Fixed game engine bugs in C++

Education

- BSc. Computer Engineering at the University of Alberta
  Final year, expect completion December 2017. Only a couple of evening courses remaining; can work full time while completing them
- High School Diploma, Strathcona Sr. High School (Honors with Distinction)

Awards for Academic Achievement:
- Alexander Rutherford Scholarship (2011)
- University of Alberta Academic Excellence Scholarship (2011)
- Jason Lang Scholarship (2012)
- A Talisman Engineering Undergraduate Scholarship (2013)
- Louise McKinney Scholarship (2013 & 2014)

Technical Experience

- Comprehensive knowledge of **Java** including **Swing** and **JavaFX** desktop UI
- Experienced with the **Android** toolchain and ecosystem. Able to design, program, and deploy an Andoid app
- Comfortable diving into and working on existing large **enterprise scale** code bases
- Accustomed to using **version control systems** (Have used: Git, SVN, Perforce) and doing **code review**
- Experience working under **SCRUM** and **Agile** development methodologies
- Extensive work experience with **C and C++ programming**. In depth knowledge of the technical details of C-family languages and their associated toolchains
- Solid working knowledge of many other programming languages such as **Python**, **PHP**, **C#**, **Scala**, **Matlab** and **JavaScript**, and at least some knowledge of most common languages. Able to become productive with any programming language very quickly
- Some frontend and backend web development experience. Can extend and modify existing websites and web services
- Basic **DBMS** knowledge for **NoSQL** and traditional **SQL** systems. Able to do basic database design and use existing databases in applications and web services.
- Good general working knowledge of IT systems. Experienced working in **Windows and UNIX command line environments** and writing scripts and tools for those environments
- Extensive understanding of low level computer architecture (Machine Code, Caches, Pipelining etc…). Able to do **assembly-level debugging / reverse engineering** of programs.
- Some experience working with C and Assembly on **embedded systems**, including designing and building a remote mapping robot for a University Capstone Design Project on one
- Good understanding of **TCP/IP networks**, including ability to do inspection / debugging of those networks with tools like Wireshark
- Solid knowledge of **electrical theory and circuit design fundamentals** (mathematics of LRC circuits, circuit simulation tools, common circuit components like diode bridges)

Additional Information

- Github Account: `stravant`
- Website: www.stravant.com
- Hobbies include contributing to open source projects and playing Magic the Gathering

References Available Upon Request