4130 Prince Edward Street.
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Elias Carter

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Employment

Software Engineer	**3v Geomatics**	**August 2018 – Current**

- Design system software for satellite radar image processing in linux high performance computing cluster.
- Containerized satellite image processing software via Docker.
- Leading migration of high performance computing systems to cloud environment.
- Responsible for company software engineering practices. Run training workshops and presentations.
- Overhauled CI/CD system: svn to git migration; multi-branch CI/CD; streamlined build sharing.
- Mentor junior engineers.

Software Engineer	**Electronic Arts**	**September 2017 – July 2018**

- Engineer and maintain 24x7 automation systems containing hundreds of VMs and consoles.
- Develop for multiple platforms/tool chains (xbox, playstation, windows, osx, linux, android, ios).
- Automate hardware farm self healing actions to boost reliability to over 99%.
- Pioneered Gitlab CI stack (python, docker, dc/os).

QA Tools Developer	**Kardium**	**May – December 2016**

- Reduced engineering change overhead of clinical designs by 60% via process automation.
- Developed safety critical quality management and regulatory systems which were formally tested and verified to meet ISO 13485 clinical requirements.
- Spearheaded integration testing framework for QA tools suite by using database spoofing.

Researcher/ Software Developer	**Syncrude Research**	**January – August 2015**

- Researched/Developed patented technology: https://patents.google.com/patent/CA2932064A1/en
- Engineered hard real time embedded system to simultaneously process and collect data from 50+ sensors in order to signal downstream industrial equipment.
- Prototyped and implemented cutting edge denoising algorithms on embedded system from research papers.

Software Developer	**Ballistic Echo Inc**	**May – August 2014**

- Integrated SQL, .NET, and EXCEL to create an automated database reporting tool.
- Utilized WinForms and WPF (MVVM) frameworks to create dynamic GUIs.

Education

Edmonton, AB	**University of Alberta**	**Fall 2012 – April 2017**

- BSc in Computer Engineering co-op, with distinction, April 2017. GPA: 3.8
- Undergraduate Coursework: Operating Systems; Databases; Embedded Systems; Device Drivers; Algorithms; Digital Circuits; Electronics; Computer Architecture; Software Engineering.

Projects

- **Bogo Scheduler** (2017). Bogo-sort inspired process scheduler for Linux Kernel 4.11. kernel, sys call, OS
- **ReliableSort** (2017). Fault tolerant sorting system. Java, JNI, C, backup algorithms
- **TinyFileTransfer** (2017). Encrypted file transfer utility. Java, JNI, C, public key exchange, encryption
- **ELongJump** (2017). x86_64 implementation of setjmp and longjmp C functions. C, x86 assembly
- **SSCTE** (2016). Android trading card app. Android Studio, Java
- **GitHub**. https://github.com/edcarter

Volunteer Work

- **Vancouver Linux Users Group (https://vanlug.bc.ca):** Director at Large