

# Richard Carson

IT Security Specialist  
Software Developer

**Telephone:** (613) 884-1542  
**Email:** r.carson@calian.com

A Carleton software engineering graduate and Algonquin alumni with over 10 years of industry experience, and a strong focus in IT security. Combines the leadership skills and proactive problem-solving of engineering with excellence in programming and software design. Proven reliability and enthusiasm towards the design, development, and deployment of software.

## Education

---

### Bachelor of Software Engineering, with honours (Carleton University) 2013 - 2017

A four-year engineering degree encompassing many areas of study including:

- DevOps
- Agile development
- Embedded systems programming
- Mobile and web development
- Software systems design
- Mathematics and science
- General engineering principles

The program culminated in a year-long capstone project: our team designed and developed a gesture-controlled guestbook which leveraged the Microsoft Kinect to capture and interpret a user's handwriting as they wrote in the air.

### Computer Science Engineering, Computing Science (Algonquin College) 2010 - 2013

A three-year advanced degree involving:

- Technical communication skills
- Embedded systems programming
- Compiler architecture
- Mobile and web development
- COBOL programming

The program's final year included a project designed to use our accumulated skills. Our team developed a mobile application for wall-mounted tablets designed to give directions to locations on campus, as well as classroom schedules.

### High school (E.S.C. Garneau) 2010 - 2013

The final two years of high school involved a specialisation program called Focus. This program involved college-level programming and IT related courses.

In 2010, I won gold in the provincial and national Technological Skills Competition, in the Information Technology category. This involved server setup, advanced network setup, and programming.

# Richard Carson

IT Security Specialist  
Software Developer

**Telephone:** (613) 884-1542  
**Email:** r.carson@calian.com

Work

---

## IT Security Specialist (Secure Technologies International / Calian) 2017 – Present

As an IT security specialist, I work with clients in order to install, configure and maintain elements of IT security infrastructure as well as to design, plan, and deploy that infrastructure. My responsibilities include:

- Design and implement Gemalto solutions, including Luna HSM, KeySecure, SAS, and STA for numerous Canadian Federal Government Departments and Private Sector parties.
- Design, and deploy PKI services such as CA, OCSP, and NDES servers
- Test the appliances against the Security Policy
- Provide technical assistance, implementation recommendations, and network architecture advice to our entire customer base, which includes numerous Canadian Federal Government Departments and Private Sector parties.
- Create technical documentation and procedures for the Professional Services, and Technical Support Team
- Manage the internal cyber awareness program by creating and running phishing tests, and deploying learning material
- Perform system maintenance, upgrades and end-user support for business-critical software systems
- Create software for government clients under a professional service contract
- Design, maintain and develop for MySQL, MongoDB, and MSSQL databases
- Create web, desktop and command-line tools in Python, PHP, C++, C#, JavaScript, and Ruby
- Use DevOps technologies, including automated testing and deployment tools
- Design and manage cyber awareness training programs both internally and for clients

## Software Developer (Secure Technologies International) 2010 – 2017

As the company's sole software developer, I was responsible for the design, development, maintenance and deployment of software for use internally, and by clients. I was also responsible for customer support issues, internal operations support, as well as professional services technician/architect duties.

Other responsibilities included:

- Coordinated and executed the design, development and deployment of the company's invoice, support and sales management system
- Performed system maintenance, upgrades and end-user support for business-critical software systems
- Created software for government clients under a professional service contract
- Designed, maintained and developed for MySQL, MongoDB, and MSSQL databases
- Created web, desktop and command-line tools in Python, PHP, C++, C#, JavaScript, and Ruby
- Used DevOps technologies, including automated testing and deployment tools
- In-house information security services and developing/expanding information services in the areas of policy development, security assessments, audits, disaster recovery and business continuity

# Richard Carson

**Telephone:** (613) 884-1542  
**Email:** r.carson@calian.com

IT Security Specialist  
Software Developer

- Manage STI's gateway security systems which include a McAfee firewall (MFE), mail security appliance (MEG), and a Web Filtering Server (MWG)
- Designed and implemented McAfee MFE Firewall and MWG for numerous Canadian Federal Government Departments and Private Sector parties.
- Test the appliances against the Security Policy
- Provide technical assistance, implementation recommendations, and network architecture advice to our entire customer base, which includes numerous Canadian Federal Government Departments and Private Sector parties.
- Create technical documentation and procedures for the Professional Services, and Technical Support Team
- Design, Implement and ensure Change Management Policy is followed
- Support all internal IT infrastructure at STI including Exchange Server, Domain Controller, Blackberry Server, all Security Devices, and Desktops.

## Systems Administrator (Secure Technologies International) 2010

As the systems administrator, I was responsible for the installation, configuration and maintenance of servers. Additional responsibilities included:

- Performed hardware and software setup of servers and desktops
- Configured and maintained Linux and Windows servers
- Performed network and systems administrative duties
- Responded to internal support tickets

---

## Skills

### Programming Languages

- **C** Algonquin College, Carleton University, Personal projects
- **C++** Algonquin College, Carleton University, Secure Technologies International, Personal projects
- **C#** Carleton University, Secure Technologies International, Personal Projects
- **COBOL** Algonquin College
- **Java** Algonquin College, Carleton University
- **Javascript** Carleton University, Personal Projects
- **PHP** Algonquin College, Carleton University, Secure Technologies International, Personal Projects
- **Python** Carleton University, Secure Technologies International, Personal Projects
- **Ruby** Carleton University, Personal Projects
- **Node.js** Personal Projects, Calian Ltd.

### Version Control Tools

- **Git** Carleton University, Secure Technologies International, Personal projects
- **Github** Carleton University, Personal projects

# Richard Carson

IT Security Specialist  
Software Developer

**Telephone:** (613) 884-1542

**Email:** r.carson@calian.com

## DevOps Tools

- **Docker** Personal projects
- **Travis CI** Carleton University, Personal projects
- **Maven** Carleton University

## Other Tools

- **ESXi** Personal projects, Secure Technologies International
- **Gitlab** Personal projects

## Frameworks

- **JQuery** Carleton University, Personal projects
- **Ruby on Rails** Carleton University, Secure Technologies International, Personal projects

## Certifications

- **CompTIA A+** 2009
- **McAfee Firewall Administration** 2010
- **Fortinet FCNSA** 2010
- **Gemalto HSM V6** 2017
- **Gemalto KeySecure** 2017
- **Safenet Trusted Access** 2018
- **Safenet Authentication Service** 2018
- **Vormetric DSM and VTE** 2020
- **Nato Secret Level Security Clearance**