Jonathan Senecal
TECHNOLOGICAL PROBLEM SOLVER

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Professional Profile

My personnal mission is to **make things, fix stuff and help others**.
I just happenned to love working with high tech stuff so it became my area of expertise.

I am a **detail oriented** and **challenge driven** person so I never leave a stone unturned or a question unanswered.
~~I care~~ I am passionate about what I do and I work hard for things that are worth it.
Insatiably curious, I am a **quick and self taught learner** that thrives on picking up and mastering new topics. I take a **multi-disciplined approach** to my work, incorporating ideas from the several aspects of my skillset. Asking 'what if' is something I do as often as possible, making sure everything has been thought of, and, in the process challenging myself and my teammates. I experiment constantly.

I have **10 years of experience** in telecommunications, server infrastructures and carrier-grade network design & build. Bleeding edge software technologies have become parts of my toolset to create powerful and unique infrastuctures. I eat DevOps for breakfast.
Feel free to Scroll down for more details.

The world is full of "things" waiting to be built, and I love being that guy who makes them come into being.
So, let's talk about that huge [problem/idea/project/goal] you dream of, and let's see how I can help!

Professional Skills

INTERPERSONAL SKILLS

ADVANCED

My **interpersonal and relationship building skills** helped my co-workers realize that I was available for them and that I could help them achieve much more as a team than they would as an individual.

LEADERSHIP

EXCELLENT

Always willing to help, my **excellent leadership skills** have proven themselves useful many times when they would rely on me to help them reach their potential.

COMMUNICATION

STRONG

Torough time, I also developped **strong communication skills** in order to listen effectively to my managers, co-workers or clients, communicate and facilitate discussions effectively with my team mates, prepare and deliver presentations, write documentation and so forth.

RESEARCH SKILLS

VERY EFFICIENT

Being the critical thinker I am, my **very efficent researching skills** and my ability to unterstand things quickly sometimes put me in a position of mentor towards my team as I can easily analyse situations from multiple viewpoints and research matters to define key issues and explain them.

ADAPTABILITY

GOOD

I am a **flexible team player** who prospers in a fast-paced, but organized, team work environment.

Technical Skills

METRO ETHERNET AND MPLS TECHNOLOGIES

EXPERT, 8 YEARS

My prefered networking toolkit consists of Juniper JunOS routers running BGP and OSPF protocols and use technologies such as MPLS based L2 and L3 VPNs. Traffic engineering and QoS have no secrets for me.

WIRELESS NETWORKS

ADVANCED, 5 YEARS

Wireless (microwave) networking technologies have also become something I am very familiar with, using Ubiquiti networks antennaes, I've achieved links of great distance to provide high availability solutions to customers.

FIBER OPTICS

ADVANCED, 5 YEARS

I have very extensive knowledge of CWDM and DWDM fiber networks and actually know how to splice fiberoptic cables and manage outside plant fiber networks.

SERVER INFRASTRUCTURES

EXPERT, 10 YEARS

Having worked with highly available and scalable network infrastructures, I became quite familiar with their server counteparts using micro services architectures and distributed computing technologies.

SOFTWARE DEVELOPMENT

ADVANCED, 3 YEARS

Python (3.5+) is my language of choice to code pretty much everything backend but I am also versed in Javascript, Ruby, Perl, PHP, HTML and others.

Work Experience

Director, Networking, Systems and Infrastructure

EBOX inc.

While I was at EBOX I was responsible for the restructuration and scalability of everything IT - EBOX was undergoing tremendous growth and I had to ensure the systems and network would survive it.

A new datacenter was under construction and I lead the team responsible for its realization with the different vendors and contractors. My mission: ensure it would withstand future growth, for years to come.

I also managed the developpement team and designed an authentication and access control system for a client-facing service. The system restricts content depending on a client's subscription and limits the number of devices a client can use to access the service. Due to the kind of content it protected, the system, written in Python, was designed to allow for extreme scalability.

My previous experience in building networks was put to good use to help EBOX upgrade their infrastructure to offer value added services based on MPLS technologies

Key Achievements

- Managed and improved a business critical infrastructure providing services to 100k+ clients
- Designed and managed the construction of a datacenter using state of the art equipment and technologies
- Initiated and managed a software development project that provided ways to deliver new services to grow the business
- Introduced the key concepts of the DevOps toolchain to the software development team to allow for more reliable development of applications

Director, Research and Developpement

Pre2Post Inc. / ZEROFAIL

The most significant project thorough my time as Director of R&D at ZEROFAIL was the design of a complex Network Operations and Business Support System.

With the help of my devoted team, a scalable, asynchonous RPC system was built on the ZeroMQ messaging library so that workers can be added dynamically to scale to load without necessitating any changes to client configurations.
The python implementation leverages the new asynchronous programming tools available with recent versions of Python, including the new async/await syntax and the asynchronous iterator protocol.

The system also leveraged a Graph Database system to enable very powerful queries that were used to facilitate operations. DataStax Enterprise database was chosen for that purpose, especially the new DataStax Enterprise Graph (DSE).
To interface with DSE the "Goblin" project was contributed to (the lead developper being part of my team).

This OSS/BOSS project and many others I designed and built with the development team helped ZEROFAIL reach higher levels of efficiency and enabled new sources of revenue.

Key Achievements

- Initiated and managed Research and development projects that provided new methods, solutions and improvement on existing services
- Designed and led the developement of a complex Network Operations and Business Support System

Director, Network Management Group

Pre2Post Inc. / ZEROFAIL

Due to the rapid growth of the telecommunication market in the Montreal area while I was Director of the Networking Group at ZEROFAIL, I had the opportunity to build a very extensive MPLS network accross Canada and the north of USA using cutting edge Juniper routers.
Very quickly, ZEROFAIL became a trusted source for connectivity services.

I designed the network to provide an edge over competition by making sure the whole infrastructure would have contingency plans in place in case of a problem - I wanted to build something that would stand by the name "ZEROFAIL".

To further improve the offering for highly available connectivity services, with the help of ZEROFAIL's CTO, I also designed and built the most extensive private wireless network in the metropolitain area of Montreal.

Later on, ZEROFAIL added a portfolio of fiber connectivity services leveraging the concepts and technologies I had put in place.

Key Achievements

- Initiated and managed Research and development projects that provided new services and technologies that helped grow the business
- Did the management and planning of a very complex MPLS network
- Implemented and managed business processes to allow for greater efficiency
- Lead teams consisting of many ad-hoc technicians working in many departments

Network and systems administrator / Tech. Support

Pre2Post Inc. / ZEROFAIL

I started at ZEROFAIL in the Technical support department where I quickly learnt my ways through the different systems of the company.
I became someone people would rely uppon to help fix issues, the simple and the complex ones.

Due to the extensive knowledge I promptly acquired, I became an essential asset to the company and started to operate and eventually, manage, the infrastructure.

Key Achievements

- Operated a multisite network
- Managed multiple companies infrastructures composed of many workstations and server environments (SLAs)
- Configured servers and network devices to grow the infrastructure
- Offered an outstanding technical support to the customers

Education

Electrical engineering degree (incomplete)

École de technologie supérieure

Due to the responsabilities I had at the moment with ZEROFAIL, it became impossible to attend to the courses and achieve results on par with my personal level of satisfaction.
I may continue the program in the future, but only time will tell.

Computer Science Degree - Networking specialization

2003 TO 2008

Collège Montmorency

I successfuly completed all the classes in the program without any issues or fallouts.
Furthermore, the domain specific classes were all completed with grades way above the average. I was the best student of the cohort in that program.