



Position: Cloud Infrastructure Engineering Student

Term: Fall 2019 (September 3, 2019 – December 20, 2019)

About Us:

CENGN is the Centre of Excellence in Next Generation Networks. Our mission is to accelerate the growth of the Canadian Information and Communications Technology (ICT) sector, enabling economic strength and prosperity, as well as innovation and competitiveness in this high-growth global multi-trillion dollar industry.

Through our leading-edge technology infrastructure and expertise, and the creation of a globally recognized ecosystem of partners, CENGN helps Canadian small and medium enterprises overcome commercialization barriers and grow. CENGN collaborates with top ICT multinationals, the public sector, financial institutions, and academic partners, to solidify Canada's leadership in next generation networks for the benefit of all Canadians.

CENGN's ecosystem includes members Bell Canada, Cisco, EXFO, Huawei, Invest Ottawa, Juniper Networks, Mitel, Nokia, Ribbon Communications, Rogers, TELUS, and Wind River. The company also partners with the federal government through the Networks of Centres of Excellence (NCE) and the Ontario government through the Ontario Centres of Excellence (OCE).

What We offer:

- The chance to be part of the growth of a Canadian company driven by providing opportunity for Small & Medium Enterprise (SME) Canadian companies to succeed
- The benefit of a small company in a modern setting where your ideas and opportunities for growth are nurtured and encouraged
- The advantage of working with colleagues passionate about their individual contributions to CENGN
- The gain of working with cutting edge and relevant technology
- The opportunity to work in our state of the art physical and virtual multi-vendor, test, certification and validation platform which provides a unique environment to commercialize advanced products, applications and services
- The experience of developing and deploying wired and wireless technologies that are utilized by applications such as cloud, wireless 5G, autonomous vehicles, broadband Internet and cybersecurity

For more information, visit www.cengn.ca

The Opportunity:

We are seeking a highly skilled and motivated individual for the Centre of Excellence in Next Generation Networks (CENGN's) Engineering team for a 4-month co-op term. This individual will start the term through a bootcamp to learn the latest in cloud technologies like (OpenStack, Docker, Kubernetes), next generation networking principles (software defined networking) and general professional and collaboration skills. Upon completion of this bootcamp, the student will attempt the CENGN's certification.

This position involves participation in events which may require the student to be available outside normal working hours on a few occasions during the placement. Applicants should expect to be required to work irregular hours 1-3 times during the contract.

Key Responsibilities:

Reporting to the VP, Engineering Operations, the student will work on technical projects associated to CENGN Members and Partners as well as helping implement new CENGN services supporting the Small Medium Enterprise projects in a wide variety of next generation technologies. The Cloud Infrastructure Engineering Student will provide a broad range of systems and network administration duties and contribute to technical projects led by the CENGN engineering team in the area of next generation cloud systems, cloud and Internet networking, security and high-speed wireless technology. At the completion of the term, the student in this role will be able to demonstrate and articulate in depth understanding of new technologies both internally to CENGN team members as well as externally to CENGN members and partners. The main responsibilities are:

- Collaborate in a professional manner among a team of experienced engineers
- Contribute to technical projects led by CENGN engineering team in the area of next generation cloud systems, cloud and Internet networking, security and high-speed wireless technology
- Demonstrate and articulate in depth understanding of new technologies both internally to CENGN team members as well as externally to CENGN members and partners
- Support presentations with CENGN engineering team at public events like meetups and other technical forums.

Key Competencies/Qualifications:

- Solid academic understanding of networking and systems principles
- Desire to learn and develop while exercising and demonstrating solid problem-solving skills
- Ability to work autonomously within a team leveraging online collaboration tools

- Good understanding of hypervisor architecture and principles
- Exposure and interest in Linux system components and virtualization features (libvirt, KVM/QEMU, kernel vs. user, vs. name space)
- Experience in consuming or contributing to Open Source projects.
- Integration skills through programming languages using Python, Golang, Java and shell scripting
- Any of the followings would be considered an asset:
 - Code available for review on public repositories like Github or similar
 - Experience with next generation security solution (NGFW, UTM, IDS/IPS, MDM)
 - Experience in Datacenter environment
 - Experience in Cloud Native architecture based on micro services using technologies like Docker and Kubernetes to deploy monitoring tools
 - Experience in supporting users in IT environment

Education:

- Post-secondary term in Software Engineering, Computer Science, Engineering, IT or related discipline

Eligibility

Students who are enrolled or have graduated from post-secondary institution programs which provide the relevant background and aptitude to work and enhance their skills as per the requirements of CENGN's listed student postings will qualify for internships under this program.

- Students can be at the undergraduate level (current students) or graduate level (current masters and PhD students), or they may be recent undergraduate and master graduates within three years of graduation from an Ontario-based post-secondary institution
- The student must be eligible to work in Ontario and have employee status at the company for the duration of the internship. Canadian citizen, permanent resident, or on a work/student visa
- The student may not apply with a company where there is any conflict of interest, including, but not limited to, a company where the student or relatives have any control as a major creditor or shareholder or governing board
- As a condition of employment and in accordance to CENGN's Code of Conduct Policy, all students must maintain a clean criminal record. CENGN engages a third party provider to verify student backgrounds prior to the start of the internship

Languages:

- English oral, reading and writing
- French oral, reading and writing would be considered an asset

Interested and qualified candidates are invited to forward their resume in confidence to CENGN by email to student-hr@cengn.ca. Please use " **Cloud Infrastructure Engineering Student** " as the subject line.

CENGN reserves the right to remove this posting prior to the application deadline. CENGN thanks all applicants for their interest, however, only those selected for an interview will be acknowledged. CENGN is an equal opportunity employer.