



Position: Solutions Engineering Student

Term: Winter 2020 (January 6, 2020 – April 24, 2020)

About Us:

CENGN, Canada's Centre of Excellence in Next Generation Networks, drives technology innovation and industry growth through our test bed, technical expertise, talent development, and partner ecosystem.

CENGN's ecosystem includes top of industry businesses, including members Bell Canada, Cisco, EXFO, Huawei, Invest Ottawa, Juniper Networks, Mitel, Nokia, Ribbon Communications, Rogers, TELUS, and Wind River. CENGN 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).

Our members and partners are a crucial part of CENGN's operation, providing us with the technologies needed to execute projects, and the necessary funding to enable our service offerings to Canadian small and medium enterprises (SMEs).

By providing Canadian SMEs with the infrastructure and expertise required to test their products, these growing businesses can overcome commercialization barriers. CENGN provides SMEs with full support of the development, solidification, and exposure of their test projects.

CENGN also develops talent through co-op and internship opportunities as well as training offerings. Approximately 40 students complete internships annually to strengthen their knowledge and understanding of their position by tackling new and exciting challenges.

What We offer:

- An environment providing flexible working hours and location
- 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
- An environment providing flexibility of working hours and location
- The reward of contributing to the Canadian ICT sector and helping to stimulate economic development
- The benefit of a small company in a modern setting with opportunities for growth
- The ability to work on real and impactful work that contributes directly to the company's success
- The freedom to share and execute your own ideas that are nurtured and encouraged
- The advantage of working with other students, full-time staff, and our executives who are all passionate about their individual contributions to CENGN
- Work in a consortium organization gaining exposure to the most innovative small business as well as the most well established telecom companies in Canada and the world

For more information, visit www.cengn.ca

The Opportunity:

The Solutions Engineering team plays a pivotal role as the project delivery engine of CENGN. We possess a core set of practical skills and theoretical knowledge in networking and cloud computing technology that we apply to advise and support Canadian tech SMEs and/or startups as they design and execute projects on the CENGN infrastructure. Projects at CENGN range from proof of concepts, to technology validations, to complex scaling tests, each involving an exciting mix of hardware and software technologies.

Check out some of our completed projects here <http://www.cengn.ca/service-view/past-projects/>

We are seeking highly skilled and motivated individuals to join CENGN's Solutions Engineering team for a 4-month co-op term. You will begin your term at CENGN by going through our boot camp to gain hands-on experience with the latest cloud technologies like OpenStack, Docker and Kubernetes, as well as next generation networking technologies such as Network Function Virtualization (NFV), and general professional and collaboration skills. Upon completion of the boot camp, you will attempt the CENGN Cloud System Specialist certification.

For more information about our boot camp, visit <https://www.cengn.ca/cloud-system-specialist-certification/>

You will work alongside CENGN's expert team of engineers, marketers and business development professionals and contribute directly to the execution of projects with some of Canada's most promising tech startups. You will develop hand-on experience with the latest cloud computing and networking technologies while also cultivating customer-facing skills.

Being a student on the Solutions Engineering team means living and learning on the leading edge of networking and computing innovation, tackling new technical challenges every day, and making a real difference to the Canadian startups that are defining our future.

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:

As an integral part of the Solutions Engineering team, the student will have the opportunity to contribute to all aspects of CENGN's projects with our start-up customers. This includes important contributions to:

- Working with SMEs to understand their business needs and design technical projects accordingly
- Provisioning, configuring, and customizing cloud environments in which projects run
- Advising and supporting SMEs as they execute their projects
- Decommissioning of projects upon completion
- Creating project reports and presentations, and delivering them to other teams within CENGN

Additionally, the student may have the opportunity to undertake an independent, term-long technical project that materially contributes to CENGN's Solutions Engineering capabilities.

Key Competencies/Qualifications:

- Academic understanding or hands-on experience with: networking and systems principles, hypervisor architecture and principles, and programming
- Academic understanding or hands-on experience with some of the following: Linux, OpenStack, Docker, Kubernetes, hypervisors, networking, open source projects, Python, shell scripting, public cloud platforms (AWS, Heroku, Azure, Google, etc)
- Keenness to learn and a knack for problem-solving

- Ability to work both autonomously and collaboratively within a team
- Any of the following would be considered an asset:
 - Code available for review in GitHub or other public repositories
 - Interest in business and working with tech SMEs
 - Experience using Atlassian toolset: Confluence, JIRA

Education:

- Post-secondary term in Engineering, Computer Science, Networking, 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
- Competency in any other language could 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 "**Solutions 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.