



Chief Innovation Officer, Principal Engineer

Job Description

A CIO is a strategic, innovation veteran with a career spanning **consulting engineering environments** in **charge of innovation** and change at their company. They are responsible for fostering an environment where **new strategies, ideas, and projects** can develop.

Salary

Entry — \$255,000
Middle — \$365,000
Top — \$475,000

Core Tasks

- Develop a mission plan, align growth projects with the overall direction, objectives and priorities of the company.
- Prepares and supervises the preparation of mechanical engineering designs, drawings, specifications, schedules, quantity and cost estimates for projects.
- Use innovations to nurture long-term relationships with customers and other key stakeholders.

Workplace / Environment

- Work hours**
Approx. 40 hours/week
(At key milestones overtime work may be required to meet deadlines)
- Environment**
Typical office or home office, field work **includes in-person site visits**
- Travel**
Required to **consult with stakeholders** about sites, plans, and inspections

Education / Prerequisites

Education Level

Bachelor's degree in engineering, business, or related fields.

Licensing

Professional Engineer

Pre-Job Preparation

Typically 10+ years in the workforce including experience in an executive position

Experience

Soft Skills

- Excellent Communication
- Leadership
- Problem-Solving Skills

Technical Skills

- Risk Management
- Engineering & STEM Knowledge
- Innovation



Career Path: Allan Montpellier

About Me

Chief Innovation Officer, Principal Engineer at PAE | Sustainable Engineering

Bachelor of Science, Mechanical Engineering from University of Alberta, Edmonton, AB

Early Choices

"I, like many people in high school, met with guidance counselors, took aptitude tests, **tried to figure out where my passions lied. I wasn't thinking too far ahead.** I would sketch buildings, layouts, floor plans, and things like that. I enjoy that. Where I grew up in Edmonton, Alberta, it wasn't a common thing to travel long ways to go to university. The closest for me was the University of Alberta, and they did not have an architecture program. So, I looked into other possibilities, but we didn't have a lot of money. So that's where I started to think more **seriously about engineering** as the next best option."



Career Choices

"One of the advantages of mechanical engineering was that you could really **end up in a lot of different places**, you could end up working for oil and gas, I personally didn't have any passion for oil and gas, it was just not my thing. My dad was an electrical engineer, and he **worked in the building business**, he **helped me get connected** with some people. One of my first real engineering internships was with a firm called Hemisphere Engineering in Edmonton, where I worked a couple of summers."

New Opportunities

"I have always had this **desire to challenge myself**, that led me to move from Canada to the US, and I landed in San Francisco at an engineering firm. I had lived at home all through my life, so that was a pretty big change. The thing that was very fortunate for me was finding a **handful of great mentors**. They were great engineers, but they're also **very passionate about sustainability**, that's where I gained **my passion**. Similarly, the thing that I found about the world of engineering and sustainability was it is always about finding the next new thing, and figuring out how to do things better. Which **meshed very well** with my personality, my desire to push boundaries, and figure things out. That's where that alignment developed, and **solidified my passion** for high performance buildings and sustainability."

About My Job

"I love the variety, it keeps life interesting."

Pros

- "One of the things I appreciate most about my job is the **ability to collaborate, work with people, and influence projects**. To give them things to think about, **challenge the status quo**, and see if we can do things better."
- "We tend to work on a lot of **very unique projects**, which is another thing that I appreciate about the firm that I'm at right now. We put ourselves in the category of value added, **consulting engineering**, and we like to do a lot of bespoke work. We try not to operate in **commodity designing**."

Cons

- "On the con side, it **can be tough to juggle everything** and to keep all the plates spinning. That definitely is one of the challenges and it **can eat into some of my personal time**. One of the things about a career is that if you're passionate enough about it, it's **not really a burden**. You enjoy spending that extra time if needed."

Fieldwork

- "I'm going to be traveling to La Paz, Mexico, and I'm gonna be **interviewing for a project**."
- "There's gonna be other days where I get to go on site to **visit actual construction** going on, **meet with the contractors**, and **see the results** of the actual engineering and design work."

Office Work

- "It actually **varies quite a bit**. There can be days where I'm in a bunch of meetings, both in person or now remotely with the post-pandemic situation."

Skills

- "I would say to get into engineering and sustainability, the sciences are important, math, chemistry, physics, all that stuff. **All STEM classes.**"
- "That consulting piece depends **a lot on skills other than STEM**. This includes **writing** good emails or reports, to help convince clients that they should be doing something that is really important. There's **incredible demand for good social skills.**"
- "Navigating a room. **Presentation capabilities are big**, presenting to 10 people all the way up to 100-200 people, for example. The engineering skills, the STEM skills are really important, but to be a good consultant, you **need to have a lot of other skills as well.**"

Education/Experience

- "**Try to get experience** with consulting firms and engineering firms. **Don't be frustrated**, if your first summer in university you're not getting that. Firms like ours are looking for people that have at least a couple of years under their belt. We tend to try to grab people that are **well into the engineering program**, I think that will be where you have more of your opportunity."
- "On the education side, get **into an engineering program**, or sustainability program, depending on how focused you want to be. I like the engineering program because there are **various disciplines**, it does **provide a lot of opportunities** to go down different paths, if you change your mind on something. That **would be a good starting point.**"

The Future of **Green Buildings**

"AI is going to be a game changer."

"One of the things that we're **delving into right now is AI**. I think that the ability to access lots of information is going to explode, you can get a lot of information on the internet right now, but I think it's going to become even easier. The question that we'll have to all navigate is: **'is it the right information?'** That's not something that we had to really test when I was in school, because there were textbooks that were heavily vetted. But, I think that with AI and all the immense amount of information that's going to be available, figuring out how to navigate that and making sure that you're leaning on **good information** is going to be **one of the biggest challenges**. The people in the firms that figure out how best to navigate that will **have an advantage**. There will still be consulting from **people like us that will be required to help people that are not engineers** to navigate all of that information and give them our best advice, or give them the information they need to make an educated decision. I think that'll still stay in place. But, it might actually become **tougher to get the right information**. As crazy as that sounds."

About Sustainability Ambassadors

We are here to **RAPIDLY ADVANCE A SUSTAINABLE FUTURE**. Empowering **YOUTH** to catalyze community sustainability, **TEACHERS** to integrate rigor with relevance for real-world impact, **COMMUNITY** to drive collective impact.

We support a year-round training program for over 60 highly motivated middle and high school youth, a Teacher Fellows Program, City-County CAP internships, and college-level interns, and work with hundreds of educators to design new models of problem-based, place-based learning around **a shared vision of educating for sustainability**.

Your Green Jobs Future

Ready to explore your future in green jobs? Use [Map your Career](#) to map your trajectory!

Find career opportunities near you now! Use [Career Connect - Washington's](#) tool to find programs to build your career skills.

Interested in a future in solar? Take a look at the [Solar Jobs Census](#) to track solar job growth nationwide.

Explore [RVC's opportunities](#) to work with organizations led by communities of color.

Dive into the [Center of Excellence for Clean Energy's](#) robust career tools in the sustainable energy sector.

Grow your professional sustainability skillset with the [Seattle Youth Good Program](#).

See Seattle's [Clean Energy Resources Map](#) to examine what the city is planning for a greener energy future.

Check out the [U.S. Green Building Council](#) to explore the sector's current opportunities. :

Funder Acknowledgement



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

