

Career Sheet: Sustainable and Smart Cities Freelancer



Cornelia Dinca (Sustainable and Smart Cities) Consultant Freelancer

I am an urbanist with a passion for building and sharing knowledge about sustainable and smart cities. I started my career in Canada's oil and gas industry but quickly transitioned to working on sustainable urban development topics, including energy and climate change, sustainable mobility and waste management, and more recently digital transformation. Over the past five years, I've been working at the intersection of sustainable and smart cities, with a focus on multi-stakeholder innovation projects, knowledge sharing, and international collaborations.



OVERVIEW OF THE JOB

For my undergraduate degree, I studied Chemical and Petroleum Engineering at the University of Calgary (Canada). During my studies, I became interested in sustainability and urban development topics, so later I completed a Master's in Urban and Regional Planning at the University of Amsterdam.

In my current roles, I am a Programme Manager for Open and Agile Smart Cities (OASC) and International Liaison for Amsterdam Smart City. My work focuses on connecting people and ideas, and especially bridging between technical and non-technical aspects of urban innovation projects. While I use very few engineering concepts in my day-to-day work, my STEM background has provided me with the analytical foundation and confidence necessary to understand and work with technical colleagues.



WHAT INSPIRED YOU

One of the biggest inspirations shaping my career path was a three-week study abroad program I went on during my undergraduate program. I travelled through China, Cambodia, Laos and Vietnam, learning about environmental and urbanization challenges in the Mekong Basin. I was the only engineering student in a multidisciplinary group consisting primarily of geographers and social science students. I discovered a very different way of looking at complex problems, which I found much more inspiring than what I had been exposed to in engineering. The program helped me develop an appreciation for complex environmental and societal challenges, and I realized that at heart I was much more an ecologist than an engineer.

During this program, I also learned that engineering solutions – say a hydro-dam – is relatively straightforward to design, build and operate, but the societal, political, economic and environmental dimensions around such projects are much more complex. These themes are still very present in my work today. While technologists claim to be able to fix our cities, the reality is that these tech solutions often underestimate key societal, political, cultural dimensions.



TYPICAL WORKING DAY

I work as a freelancer for several different organizations, so my work varies a lot. There is almost no “typical” workday, though most of my work consists of coordinating and carrying out project work and working group activities, organising and hosting knowledge-sharing events, and continuously connecting people.



STUDY & CAREER PATH

During my Chemical and Petroleum Engineering undergraduate studies, I became interested in sustainability and urban development. After my studies, I travelled to Germany to do an internship with a climate change think-tank. After several internships on energy, climate and waste management projects I decided to do a master’s in Urban and Regional Planning at the University of Amsterdam. I’ve been working on sustainable and smart cities ever since. With the knowledge I have now I think I would have enjoyed a Liberal Arts education but I had no idea what this was when I was 18 years old. I also wish that my parents and teachers would have encouraged me to learn to code at a young age. I’ve taken some basic introduction to code in recent years, which helps me understand how programmers think but my knowledge is still not sufficient to code myself.



KEY SKILLS

As a generalist, my most important skills fall under the broad categories of analytical thinking, communication and interpersonal skills. My role is usually to connect people and ideas, to foster crossovers and cross-pollination of solutions. To do so effectively, it helps that I have thematic knowledge in the fields of mobility, energy, climate, waste management, etc. Within the DUET project, I feel that my role is to make sure that the technical solutions developed will be useful for non-technical stakeholders, including civil servants and citizens. It sounds obvious but working on smart city projects over the past five years, I’ve experienced many innovations that don’t address the complexity of real-world challenges, and are not actually useful to city stakeholders. As the saying goes: “to a hammer, everything looks like a nail”. One of the things I find important in DUET and my work, in general, is to remind colleagues we shouldn’t be building hammers for the sake of it.



CAREER PROSPECT

I used to worry that the combination of an engineering undergraduate and a social-science master wouldn’t be very appealing to employers. But I’ve learned that most of my employers and collaborators are much more interested in my interpersonal skills than my academic background. My combination of skills and knowledge is relevant across various urban / innovation fields where multi-disciplinary and integrative approaches are appreciated.



CHALLENGES

One of the biggest challenges in my job is ensuring that the work I do actually leads to effective, useful and transferable solutions for cities. One of the reasons this is so difficult is because it requires bridging between technical people, like developers, and the actual needs of cities, but these are two very different worlds that don't mesh very well.



YOUR ADVICE TO STUDENTS

My advice to students is to pursue their passions and interests. I think it's also important to try and adopt a "do-no-harm" approach. We often want to make a positive impact, but I think our world desperately needs everyone to make an effort to do less harm both in our personal and professional lives.



YOUR ADVICE TO TEACHERS AND PARENTS

My advice to teachers and parents is to foster children's curiosity, teach them to be compassionate and have them spend time outdoors and in nature.



LEARN MORE

Here are links to some of my talks and projects:

- Sustainable Amsterdam: <https://sustainableamsterdam.com>
- TEDx Talk: What Amsterdam Can Teach Other Cities About Connecting People: <https://www.youtube.com/watch?v=p-ZalvgWUlk>
- TEDx Talk: Is Your City for People or Cars? <https://www.youtube.com/watch?v=p-ZalvgWUlk>
- Public Profile on Amsterdam Smart City: <https://amsterdamsmartcity.com/members/8073>
- Cornelia Dinca LinkedIn Profile: <https://www.linkedin.com/in/corneliadinca/>

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