



Manager, Big Data Analytics—Public Sector

SALARY RANGE (2018): \$52,000–\$104,000

As a manager and a big data analyst, numbers are my world—but not in the way you might think. Yes, I do love numbers and yes, I have terrific analytical skills. But what I really like to do is look at data as an art form. How can I create something different using data as a base? What does the data tell me? How can I solve a problem using data to make the world a better place? I work on projects that serve high-profile institutional, family and corporate foundations, and philanthropic individuals. We use all the data we collect and data from external sources—again, a little differently than what you might expect. My team and I help clients develop grant-making strategies, implement programs, evaluate their impact, and collaborate effectively with other donors.

The Tip: Follow your passion and don't be scared to at the same time try different things. Being exposed to different things and ideas will help you to see the data in different ways and to drill down for different characteristics and trends.

PRIORITY KNOWLEDGE AND SKILLS:

Systems Thinking

Knowledge & ability to:

- Understand systems thinking
- Analyze and map systems
- Identify and make plans for future trends
- Thrive in ambiguity and manage complexity
- Recognize trends, opportunities and underlying patterns

Human-Centered Design & Design Thinking

Knowledge & ability to:

- Apply human-centered design principles to solve problems
- Think laterally
- Identify patterns
- Ability to formulate research questions
- Conduct secondary, qualitative and/or quantitative research
- Synthesize key issues

Communication, Collaboration & Facilitation

Knowledge & ability to:

- Use contextual knowledge
- Communicate effectively in all formats
- Design and facilitate collective impact initiatives
- Cultivate new collaborations and partnerships across sectors
- Use technology and specialized collaboration tools

Changemaking

Knowledge & ability to:

- Be authentic, empathetic and ethical
- Ask questions
- Embrace challenges as opportunities to create systemic change
- Demonstrate long-term social impact and sustainability
- Break down silos and leverage relationships

Oversight & Knowledge Management

Knowledge & ability to:

- Develop and manage the planning process
- Direct coordination of activities across departments, stakeholders, clients & users
- Manage operations & resources; provide oversight
- Leverage stakeholder relationships
- Develop and implement program schedules
- Budget management & oversight
- Evaluate social, financial and collective impact
- Manage and analyze complex data

Core Transferable Skills

Be an expert at all core transferable skills:

- Thinking skills
- Communications skills
- Organizational skills
- Interpersonal skills
- Technical literacy

BUILDING BLOCK EXPERIENCES:

<p>Education & Learning:</p> <ul style="list-style-type: none">• Bachelor of Computer Information Systems• Completed a co-op with a company that used data about customers to create websites• Teaching English as a Second Language certificate• Master of Research• MS Office webinars in Word, Excel, and PowerPoint and Adobe InDesign• Numerous workshops and webinars on coding and applied machine learning platforms (e.g. Google Prediction API, Microsoft Azure)	<p>I have an unusual skillset in that I love to read, synthesize information, and write reports, but I also got hooked on statistics that illustrate my conclusions are based on solid numbers. During high school and much of university I could just use Google Docs and Sheets, but the more work experience I gained the more I realized I needed to be proficient with MS Office and Adobe InDesign.</p>
<p>Employment Experiences:</p> <ul style="list-style-type: none">• First summer job was as an admin assistant at a gardening store. I helped develop an in-store campaign to try a new organic weed deterrent. I was hired back for the second summer and was allowed to set up some research on customer buying habits.• My next summer job was at a bookstore where I tried to not spend my paycheck on books. I helped to upgrade their software program for more accurate inventory counts.• Post-university I taught English in Japan and was exposed to some leading-edge software for teaching and communicating with students• Next, I taught English to refugees in Europe awaiting processing to come to Canada, which led to a contract with Doctors Without Borders to contribute to a fundraising campaign where I developed a survey and presented the findings. The challenging part was to apply the survey in six different countries and collate the data to determine global trends and issues. This experience helped me to realize I needed to learn better research techniques and I went back to school.• My first job post-master's was with the Red Cross, collecting and analyzing data on existing supplies and gaps in equipment needed. The report I created contributed to the content for a grant-writing project.• Since working with the Red Cross, I have collected and analyzed data for a variety of governmental organizations like the World	<p>I discovered the concept of social enterprise while working at the bookstore and was hooked. While I was teaching English to refugees, I surveyed the people, determining their daily language learning needs as well as those related to their careers. The goal was to target the language programs to create an easier transition to the new country. Doctors Without Borders were able to also use my survey to better communicate with their patients. It was the job at Red Cross that helped me realize I was interested in large data collection specifically focused on global trends</p> <p>During my contract with the World Health Organization, I realized many of the staff had innovative ideas for improving existing programs. I let the management know and they asked me to create an anonymous survey, so they could access and implement some of those ideas.</p>

<p>Health Organization where I determined infrastructure supplies for water campaigns.</p>	
<p>Community Experiences:</p> <ul style="list-style-type: none"> • I volunteered to write grants for my favourite environmental charity, but what I didn't initially realize was that I also needed to research to find appropriate grants as well as build the data to support the "ask" • This led to a board position as a community director, which I held during six years of university 	<p>This volunteer position was a great way to gain experience while I was attending university. We established some timelines for major grants and they allowed me to come and go as it worked with my study schedule. When my volunteer role evolved into a board member, I saw a style of big picture decision-making that was totally new to me.</p>
<p>Contextual Experiences:</p> <ul style="list-style-type: none"> • Belonged to the environment club and developed a campaign to raise awareness about reducing light pollution 	<p>Because my work often involved contracts, I had time to investigate other ideas. During a discussion with a friend who was involved with a startup, I helped determine which social cause their clients would best respond to. This led to other small contracts for startup social enterprises.</p>
<p>Relationships:</p> <ul style="list-style-type: none"> • My friends have a lot of the same values as I do 	<p>Many of my friends are entrepreneurs with who are also concerned with the health of our planet. We love discussing issues and throwing around ideas of multipronged strategies for creating a better environment for the animals and the people.</p>