

Environmental Science Career Readiness
Seminar Environmental Career Encyclopedia

UNI Student

January 21st-May 9th 2022

Table of Contents

[Adam Campbell](#)..... Page 3

[Candice Kucera](#)..... Page 4

Top 3 List of Speakers that I thought Sounded Most Interesting for a Future Job:

1. **Gordon Krueger**, the Environmental Safety Coordinator & Radiation Safety Officer, I've always been interested in how companies can be safe environmentally and protect the people that work there. Gordon gave a good representation of what he does everyday and the things he has to deal with.
2. **Jessica Ragsdale**, IDNR Environmental Services Division. In the future I would like to do something with water and Jessica's job seemed like it would be a good fit for me. She had some cool stories and pictures which really got my attention.
3. **Tim Skrotzki**, who works for Elevate Energy, East Atlantic University, stuck out to me because he also gets to help people, just like Gordon, but in a different way. Tim helps people save money by doing energy assessments and looking at utility usage to calculate the savings that could be done based on these things. This really sparks my interest and I will be looking into the position more.

Some other Speakers that were also Interesting to me:

- **Candice Kucera**, Cedar Rapids Water Division, Lead Water Quality Analyst.
- **Chad Fields**, Hydrogeologist Water Supply Section-Iowa DNR
- **Faith Luce**, Black Hawk Creek Watershed Project Coordinator
- **Joe Reinders**, Minnesota Pollution Control Agency

[Link](#) for our Env. Webpage with Speakers Videos

Adam Campbell (2/21/22)
LiDAR Product Leader
Surdex Corporation

Background

- Grew up in Waverly
- Graduated from W-SR in 2005
- Started UNI in the fall as a Social Studies Ed major
- Switched to environmental geography junior year. Always loved being outside, hiking, also had to get out of teaching
- B.A. and Certificate in GIS/cartography
- Did research with Dr. Heinzl to graduate from the Honors Program
- Attempted a year of grad school at University of Delaware, but burnt out

Career Info

- Started at Aerial Services, Inc in Cedar Falls the summer after Junior year
- Worked on/off for 3 years until starting full time
- Did a little bit of everything...
 - Orthos
 - Mapping
 - DB management
- Eventually settled into LiDAR in 2012
 - GISP certificate in 2015
 - CMS-Lidar in 2016
- Started at Surdex Corporation September 2020
 - Lead group of 4 full time LiDAR people
- Transitioning to Project manager 2022 (working with companies to develop their projects, managing the process of a project)
- You track your time on the project to know how much things are going to cost

Changes Ahead

Changes that have already been made and that are to be seen in the future...

- Ability to work from home for most positions in the GIS/Remote sensing
- Process becoming more automated
- Use of multi-model platforms
 - Handheld
 - Drone
 - Mobile (cars)
 - Aerial
 - Sub-stratosphere
 - Satellite
- Climate change and change detection
- Working with other disciplines to maximize data utilization

If he had to do it all over again...

- Started off in Geology and geography right away
- Done more field experiences and trips
- Stayed an extra year instead of a 22 hour final semester, way too much, maybe get a minor
- Got involved in national groups like ASPRS or GSA

Who people look for...

- Experience, get as much in as you can
- Comprehension of basics and standards
- Most importantly...Willing to learn, ask questions, but also initiative explore on your own

Salary...

- When he first started, he was making \$12 an hour
- Entry level \$15-\$18 range
- Over the years you can grow your salary pretty well
- Tech to analyst to group leader to Project manager to director

Work-life balance

Part of it is great and the other part, not so much

My Interpretation:

I thought this job was interesting but not for me. I can go down the street and work at the Target distribution center for starting wages of \$21. I really want to use my degree and go far in life, not work a job that I could be making way more without a degree even. Also, I'm not the biggest fan of GIS and he did talk about how that's part of his job. I was interested when he was talking about how they use Lidar and what it looks like. Another thing that was interesting was the way Lidar was able to hit points that go through trees but also the actual tree itself. He is now working as the project manager which is exciting after being there for some time. Overall, this job doesn't seem like a good fit for me but was interesting to learn about.

Candice Kucera (3/7/22)
Cedar Rapids Water Division
Lead Water Quality Analyst

Background

- Fell in love with minerals course
- Graduated high school 2014, then college in 2018
- Earth and Environmental Science, Double Major

M-F 7am-3:30, Works some weekends

In the Lab but also in the Field

- Bacteria
- Orthophosphate
- Ammonia
- Alkalinity
- Hardness
- Anions-IC
- TDS

Test from river wells, Test at the Cedar River, Open fire hydrants

Looking Forward

- Demand for Water
- Water Resources
 - Tanks/boosters
 - Plant expansions
- SDWA Requirements
- Middle Cedar Partnership

What Would I do differently?

- Know how to look for the right job
- Never Settle
- Don't be afraid to say no to offers
- Ask all the questions
- Research/Volunteer
- Know your strengths
- Continue working on your weaknesses

My Interpretation:

I really enjoyed listening to Candice's presentation. I was able to relate to a lot of what she was saying and learned some stuff I didn't know. We also tested for hardness, alkalinity, and some of the others as well during my internship. She also touched on how you can see Covid in water which is super cool. I liked her explanation on why there's always a demand for water and also the process of cleaning water. Her job seemed interesting but very repetitive. I want to deal with

all sorts of things at work and not just focus on doing the same task everyday. She did say sometimes she's in the field but not a whole lot. Overall, she was really informative and her job seemed interesting
