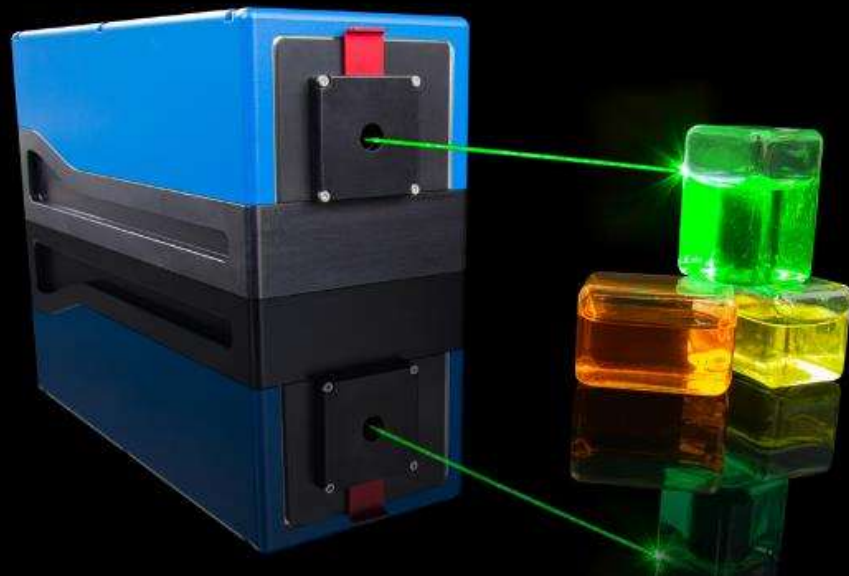


■ The Traveling Salesman Solution

21 November 2024, UIUC Physics Career Seminar

Michael Highman, Ph.D.
Government Accounts Manager, East Region



Agenda

1. TOPTICA
2. How did I get here?
3. What is technical sales?
4. A day on the job
 - A different day on the job
5. Quality of life
6. Q&A (any time!)

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TOPTICA Worldwide



○ TOPTICA Photonics Distributors

● TOPTICA Photonics
Germany, USA, Japan, China,
France

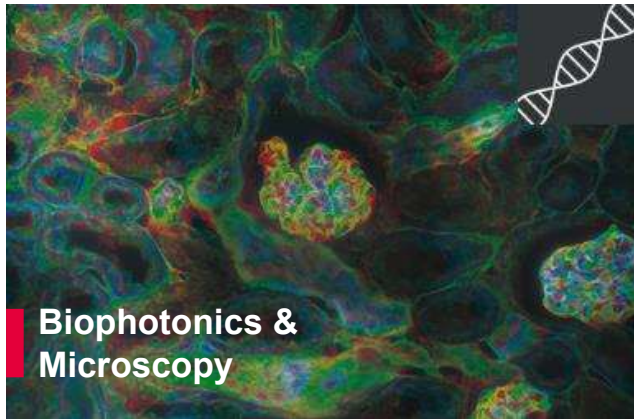
● TOPTICA Projects
Germany

● TOPTICA eagleyard
Germany



TOPTICA Application Spaces

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Biophotonics & Microscopy

- Microscopy
- Neuroscience
- Cytometry



Measurement & Processing

- Lithography & Holography
- Spectroscopy & Inspection
- Metrology



Quantum Technologies & Spectroscopy

- Quantum Computing
- Quantum Sensing
- Atomic Clocks


Our Product Range at a Glance

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Biophotonics & L



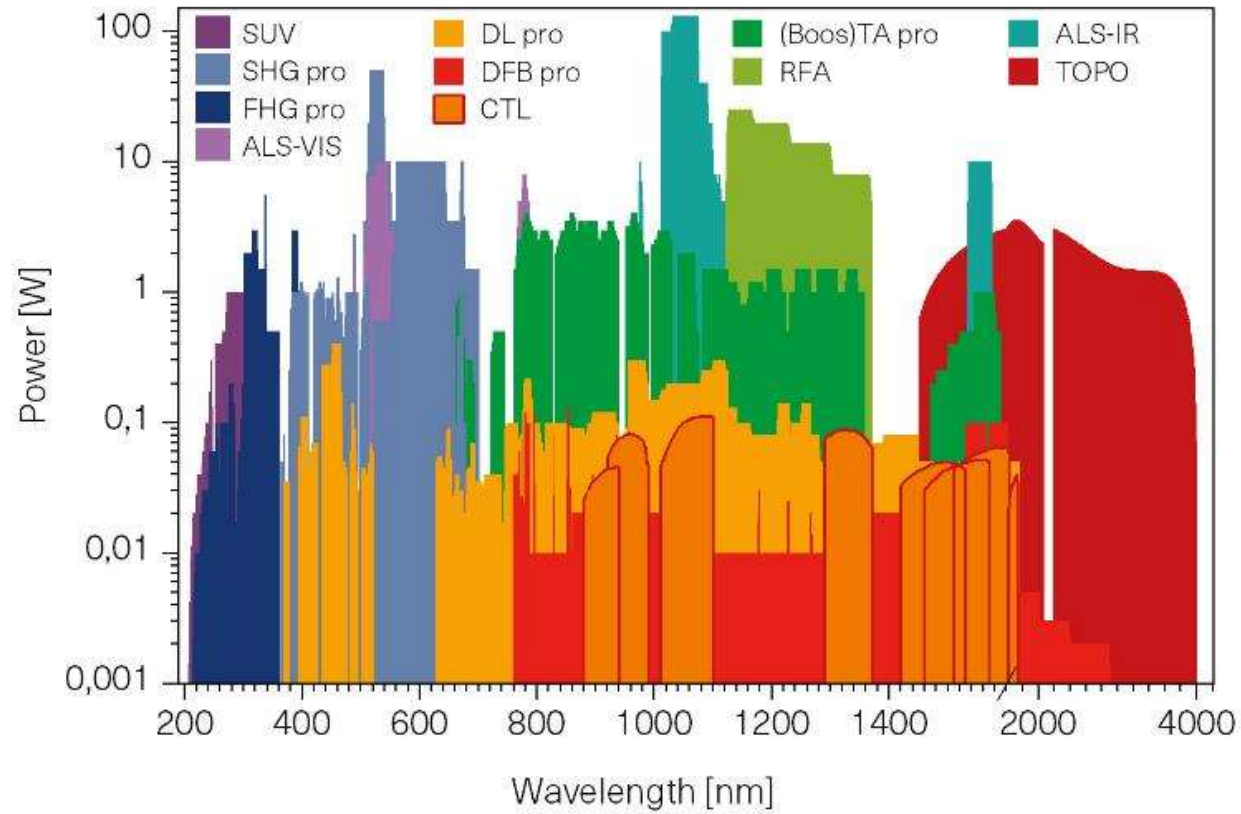
Single Mode Diode L




ps/fs Fiber Lasers




MLE Multi Laser Engines




Technologies



Lasers



ers Frequency Combs



systems

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How did I get here?

- Atomic physics since freshman year spring semester of undergrad
- „Builder Student“ for both undergrad and grad school.
- Love science as an endeavour, soured on science process over time
- Always enjoyed networking, teaching, traveling
 - Prefer „people problems“ over lab problems
- Want to remain science adjacent and use my background in some way



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ILLINOIS
URBANA - CHAMPAIGN



How did I get here?

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- In addition... it helped to have non-school work experience



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■ Why do salespeople exist?

- Sour on sales? I understand.



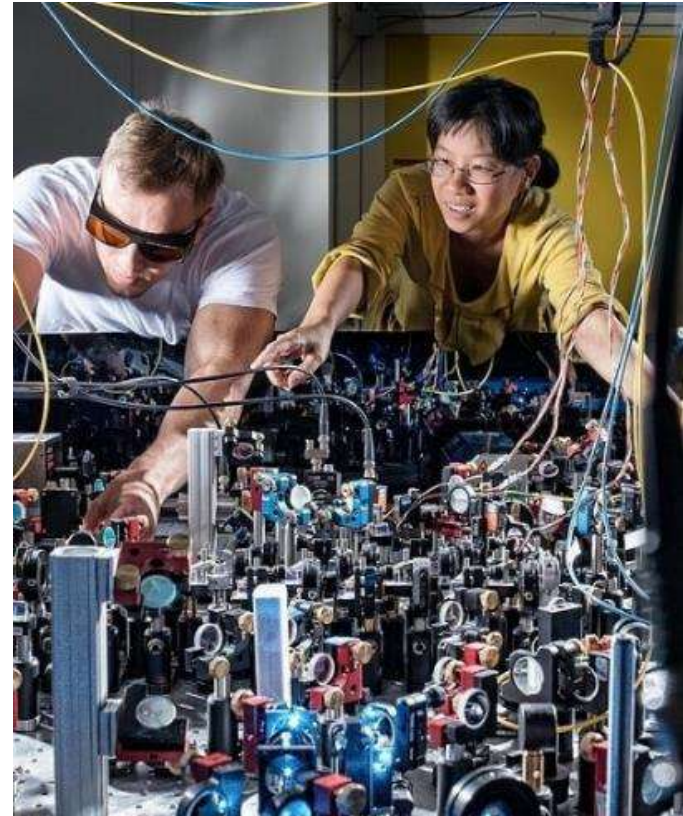
If you're thinking of car buying...

- Large personal investment
- High-pressure sales tactics
- Constant "add-on" attempts

Experience: Neutral-to-bad

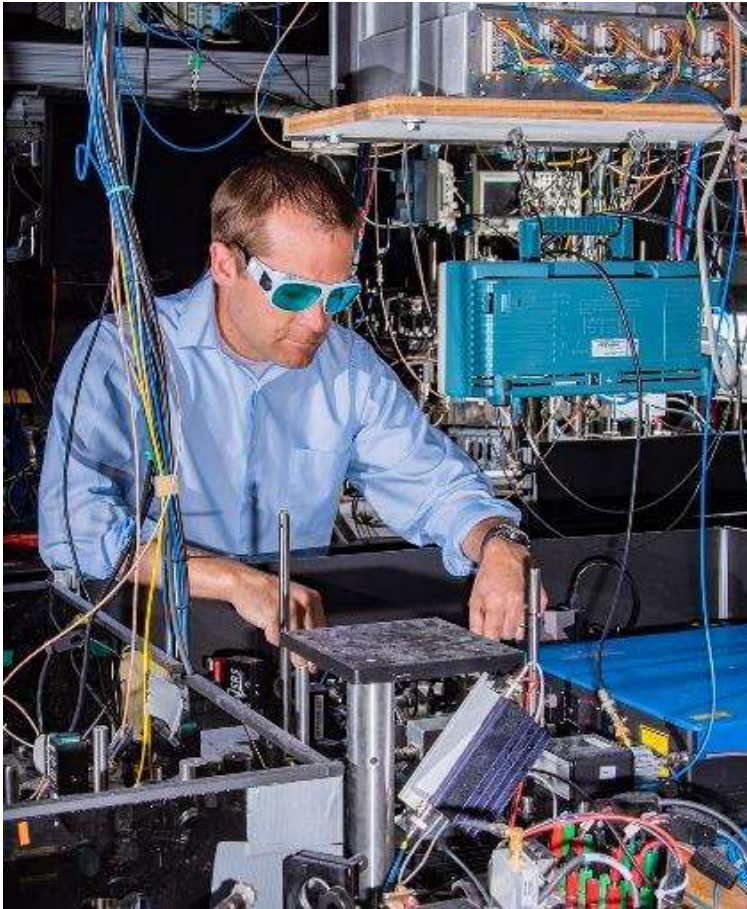
Why do salespeople exist?

- Reasons you might need a salesperson:
 - The dollar value is large
 - You're buying in significant quantity
 - **The thing for sale is too complex to sell itself**



What is Technical Sales?

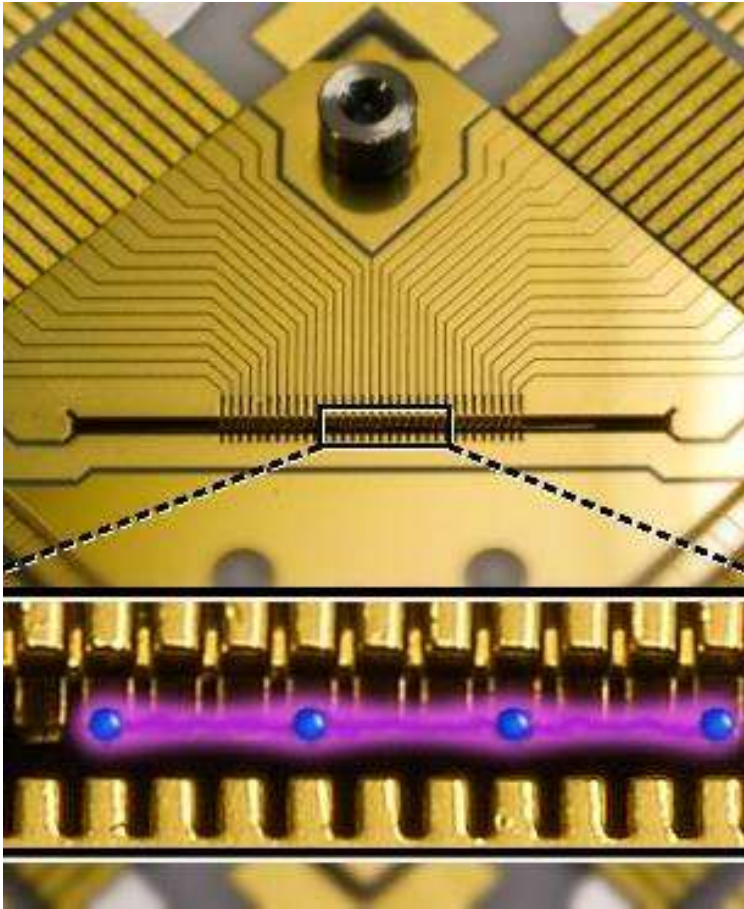
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- Listening
 - Learn about applications and projects from the world leading experts
- Teaching/Education
- Finding solutions to meet customer needs
 - External and internal communication
- Paperwork and Bureaucracy
 - Assisting with Proposals
 - (For me) Government process

What is Technical Sales?

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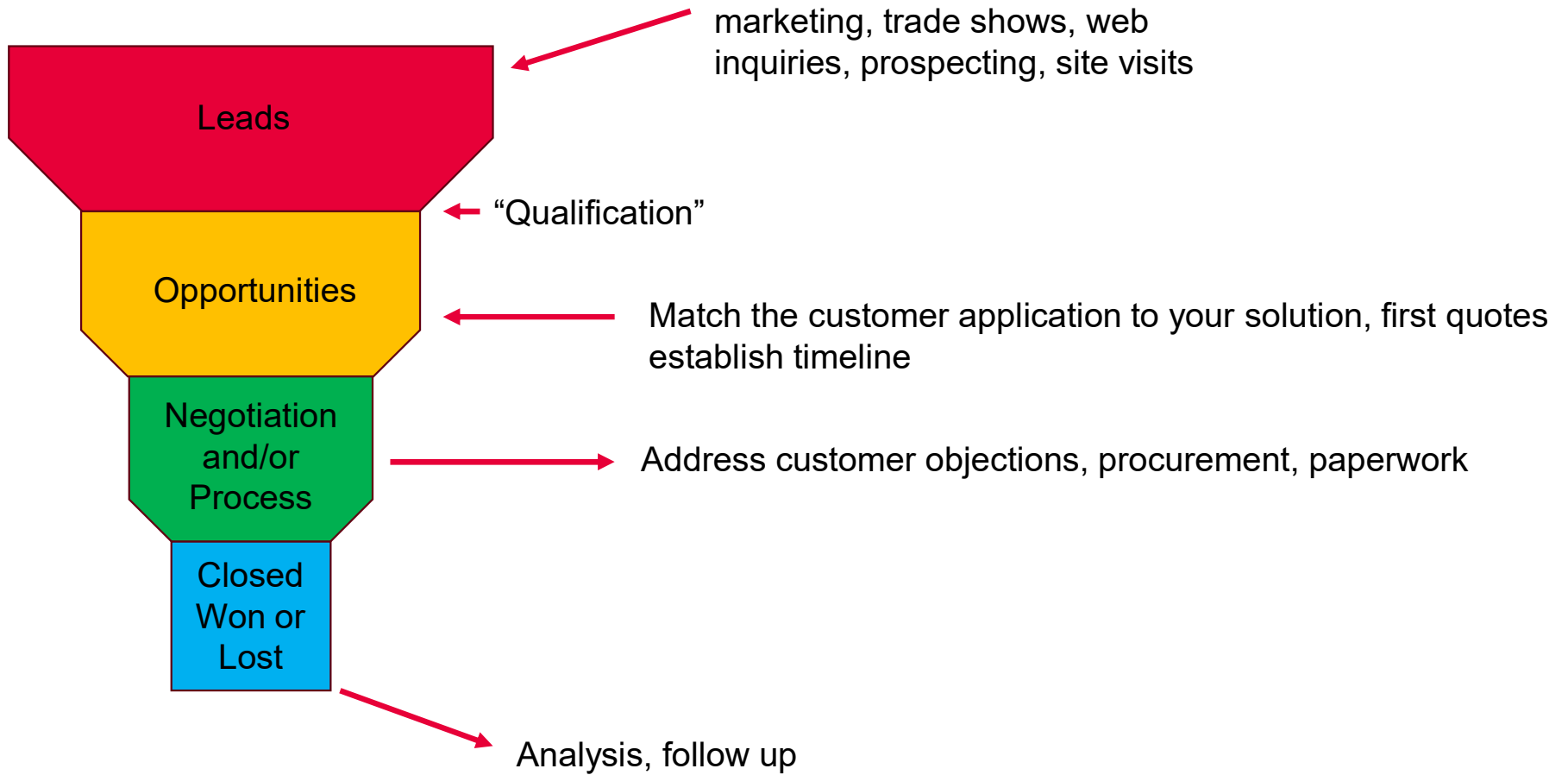
- Account management
 - Single line of communication for the company/lab
 - Relationship building
- Travel
 - Conferences, lab visits, networking, etc.
 - (Many people have this as a retirement goal!!)
- Prospecting
 - Creating new business

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The Sales Process

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Example Process 1

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I received the below web lead.

Product of Interest: MDL pro
I'd like a quote on this laser at 532 nm.

--



- For what reason?
- How much power do you need?
- Are you aware the platform you selected could not possibly emit 532 nm?
- Do you care about linewidth?
- Will you lock the laser?
- For a proposal? Need it now?
- ...

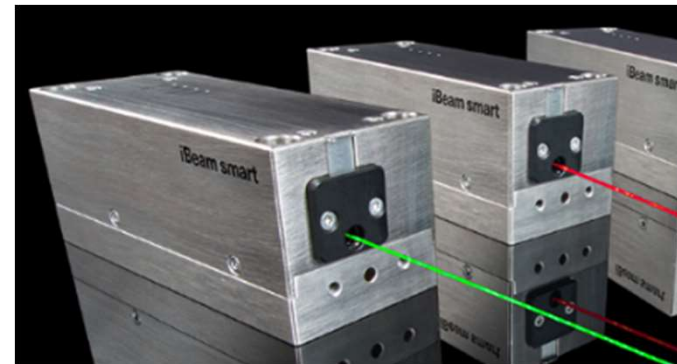
Example Process 1

1. Set up a call with the customer
2. Learned this was for NV center magnetometry
 - This will be a pump laser
 - Linewidth not important
 - Modulation (on/off) important
 - Center wavelength not important
 - Power ~ 10s to 100s of mW ok
3. Match the customer with the correct product

Product of Interest: MDL pro
I'd like a quote on this laser at 532 nm.
--



~\$40-50k



iBeam smart 520 ~\$6k

Example Process 2

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I received the below web lead.

Hello,

We are interesting in learning about your options for a two-photon Cs system: 852 nm and 510 nm.

Power options, price, lead time, etc.

- Much better!
- 2-photon Cs Rydberg sensing means:
 - 852 nm will be locked to Cs spectroscopy, low power requirement
 - 510 nm will be locked to a cavity, a comb, or EIT locking, high power (typically) tunability often matters too
- They tell me what they need to know and that indicates what's important to them
- Only a few extra options to consider from here

Conference and Customer Travel

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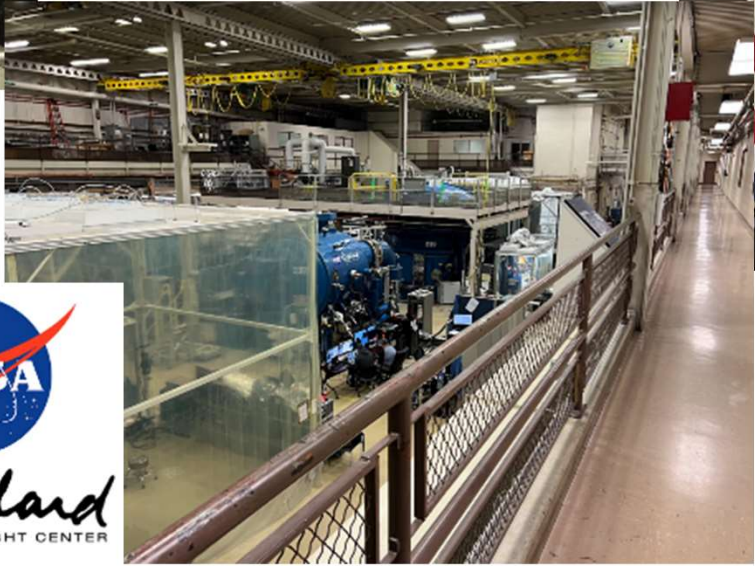


Conference and Customer Travel

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AFRL
AIR FORCE RESEARCH LABORATORY



NASA
Goddard
SPACE FLIGHT CENTER



Work While Traveling

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- Conferences
 - Get your name and brand out, connect with customers, get leads
- Customer visits
 - People talk more in person than over email, phone, video call
 - Get tours of the labs, see your products in action (see your competitor's products)
 - Find opportunities to integrate further, understand their pain points, take your findings back to product management
 - Really freaking cool
- The regular job doesn't stop...

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Life in Rochester, NY

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Life in Rochester, NY

- Temperate – Warm (not hot) Summers, Cold Winters
- Cloudy!
 - Many days of a little precipitation
- Boat load of Festivals
- Nearby travel:
 - 1 hr to Syracuse or Buffalo (Go Bills!)
 - 3 hr to Toronto
 - 5 hr to NYC
- Beautiful nature nearby
 - Lake Ontario up north
 - Finger Lakes region just to the south
 - Letchworth State Park “Grand Canyon of the East”



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Life in Rochester, NY



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■ Thank you!

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www.toptica.com

