BETHEL
UNIVERSITY

Career Interest Statements

JULIE HOGAN

10/7/21

Summer/Dept work

- Look for summer opportunities NOW for applications during Jan/Feb

- "I want to work for a company doing something"
  - Handshake
  - Career fairs here at Bethel
  - Contacts from class guests (I can connect you) or your informational interviews
  - Prep resume, interview skills, short paragraph responses for online app questions

- "I want to do scientific research"
  - Check NSF Research Experience for Undergraduates page
  - Check DOE "SULI" page (national labs)
  - Check emails that come to department!
  - Talk to the profs here, pay attention in Jr year spring's Research Seminar class
  - Prep resume, personal statement, interview skills

Grad school / job search

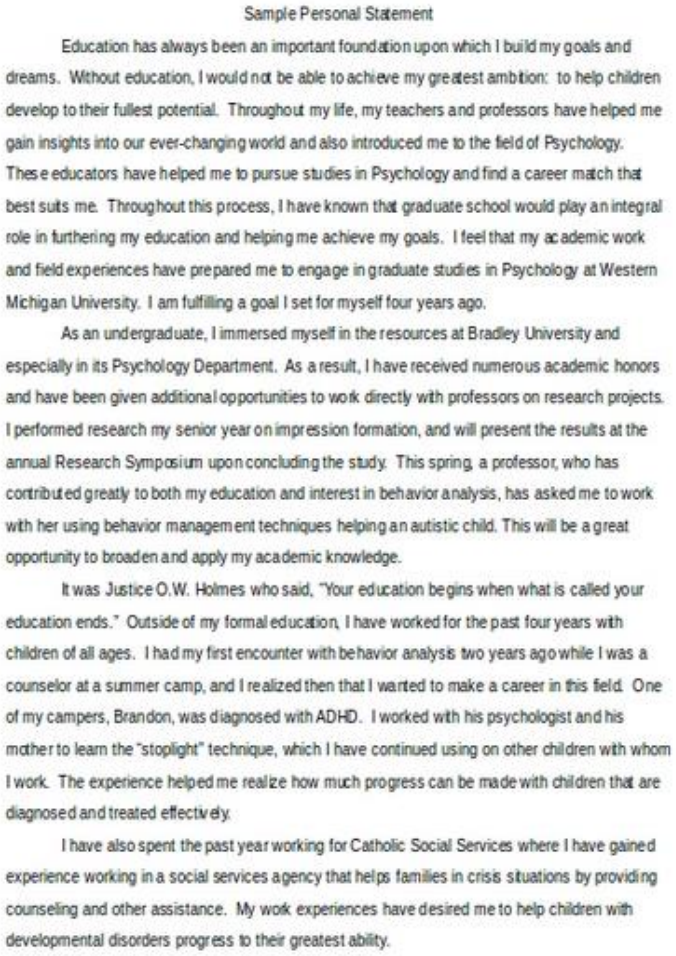
- "I want to go to graduate school"
  - Start soul-searching! Schools usually sculpt admissions based on how many grad students their faculty can take in their research areas
  - Names are a good starting point: "U Minn", "an ivy league", etc
  - But prune your list with specific website checks into what the faculty **actually do**: "at <*university*> there are 2 professors working in <*main interest*> and another 2 professors working on <*secondary interests*>".
  - We can all help you prep your statements and essays, and for the exams

- "I want a real job"
  - Maximize your summers to leverage experience into a job with that company or a similar company.
  - Maximize your network of professional contacts over the next few years
  - Do more information-gathering interviews with a broad variety of people to teach you what keywords to look for in ads
  - Take advantage of CD&C expertise and prep opportunities

Why a statement?

- In the research world, your statement is how they get to know you and decide if you fit their team
- Example: Physics postdoc position

Looks like ye olde college essay!



Sample Personal Statement

Education has always been an important foundation upon which I build my goals and dreams. Without education, I would not be able to achieve my greatest ambition: to help children develop to their fullest potential. Throughout my life, my teachers and professors have helped me gain insights into our ever-changing world and also introduced me to the field of Psychology. These educators have helped me to pursue studies in Psychology and find a career match that best suits me. Throughout this process, I have known that graduate school would play an integral role in furthering my education and helping me achieve my goals. I feel that my academic work and field experiences have prepared me to engage in graduate studies in Psychology at Western Michigan University. I am fulfilling a goal I set for myself four years ago.

As an undergraduate, I immersed myself in the resources at Bradley University and especially in its Psychology Department. As a result, I have received numerous academic honors and have been given additional opportunities to work directly with professors on research projects. I performed research my senior year on impression formation, and will present the results at the annual Research Symposium upon concluding the study. This spring, a professor, who has contributed greatly to both my education and interest in behavior analysis, has asked me to work with her using behavior management techniques helping an autistic child. This will be a great opportunity to broaden and apply my academic knowledge.

It was Justice O.W. Holmes who said, "Your education begins when what is called your education ends." Outside of my formal education, I have worked for the past four years with children of all ages. I had my first encounter with behavior analysis two years ago while I was a counselor at a summer camp, and I realized then that I wanted to make a career in this field. One of my campers, Brandon, was diagnosed with ADHD. I worked with his psychologist and his mother to learn the "stoplight" technique, which I have continued using on other children with whom I work. The experience helped me realize how much progress can be made with children that are diagnosed and treated effectively.

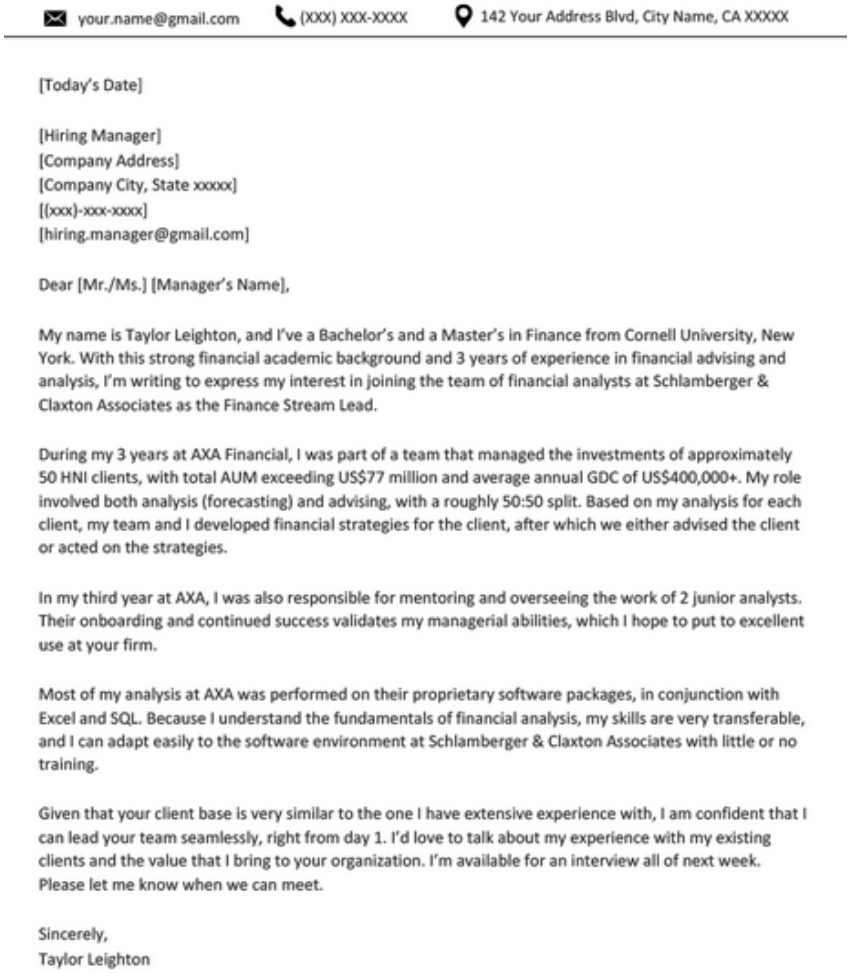
I have also spent the past year working for Catholic Social Services where I have gained experience working in a social services agency that helps families in crisis situations by providing counseling and other assistance. My work experiences have desired me to help children with developmental disorders progress to their greatest ability.

Why a statement?

- In the job world, higher level applications often call for a "cover letter":

Professional letter salutation:

Career interest statement info!



your.name@gmail.com (XXX) XXX-XXXX 142 Your Address Blvd, City Name, CA XXXXX

[Today's Date]

[Hiring Manager]
[Company Address]
[Company City, State xxxxx]
[(xxx)-xxx-xxxx]
[hiring.manager@gmail.com]

Dear [Mr./Ms.] [Manager's Name],

My name is Taylor Leighton, and I've a Bachelor's and a Master's in Finance from Cornell University, New York. With this strong financial academic background and 3 years of experience in financial advising and analysis, I'm writing to express my interest in joining the team of financial analysts at Schlamberger & Claxton Associates as the Finance Stream Lead.

During my 3 years at AXA Financial, I was part of a team that managed the investments of approximately 50 HNI clients, with total AUM exceeding US$77 million and average annual GDC of US$400,000+. My role involved both analysis (forecasting) and advising, with a roughly 50:50 split. Based on my analysis for each client, my team and I developed financial strategies for the client, after which we either advised the client or acted on the strategies.

In my third year at AXA, I was also responsible for mentoring and overseeing the work of 2 junior analysts. Their onboarding and continued success validates my managerial abilities, which I hope to put to excellent use at your firm.

Most of my analysis at AXA was performed on their proprietary software packages, in conjunction with Excel and SQL. Because I understand the fundamentals of financial analysis, my skills are very transferable, and I can adapt easily to the software environment at Schlamberger & Claxton Associates with little or no training.

Given that your client base is very similar to the one I have extensive experience with, I am confident that I can lead your team seamlessly, right from day 1. I'd love to talk about my experience with my existing clients and the value that I bring to your organization. I'm available for an interview all of next week. Please let me know when we can meet.

Sincerely,
Taylor Leighton

- Ex: biomed-E postdoc job

Example prompts

- "Describe your personal, educational and/or professional experiences that motivate your decision to pursue a STEM field."
  - Why are you fascinated by your research area?
  - What leadership skills and unique characteristics do you bring to your chosen field?
  - What personal and individual strengths do you have that make you qualified?
  - How will receiving (job, internship, etc) contribute to your career goals?
- "Include specific examples of any research and/or professional activities in which you have participated. Highlight the results and specify your role in the activity."
  - What were the key questions, methodology, findings, and conclusions?
  - Did you work in a team and/or independently?
  - How did you assist in the analysis of results?

Who are you?

- Use the Situation → Behavior → Outcome template to motivate your interest in physics or engineering
- Make "this is my personality" say "and therefore I'm a strong scientist"

STRONGER	WEAKER
Experience of disease → interest in biomed/biophysics	**I like playing video games with my friends**
Toy/electronic dissection as child → interest in electronics, engineering	**My favorite thing is family vacation time up north**
Interest in <art, humanity> → informed worldview related to physics or engineering.	**…etc…**

Jobs, experience, skills

- "I will work toward a career in an industry related to physics"
- "I am pursuing a Bachelor of Science in applied physics with a biomedical emphasis"

Identify the stronger and weaker statements in each pair/set

- "I want to make a difference in physics"
- "I would like to be a leader in the field of (subfield) engineering"

- "I want to have at least two summer internships in (subfield)"
- "I want to continue on to a possible graduate school and then find a career somehow related to physics"
- "All these experiences have guided to me pursue mechanical engineering"

- "(class) gives me skill in writing lab reports using software like LaTeX"
- "I have been studying biological imaging techniques"

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Jobs, experience, skills

- Edit with focus on **concrete possibilities and skills**:
  - "company X"
  - "(subfield) physics", "(subfield) engineering"
  - "I am familiar with data analysis in programs X and Y"
  - "I have used machines X, Y, Z to perform tasks P, Q, R"
  - "In (class) I have learned (OR WILL LEARN) to program with languages X, Y"

- **It's not a contract**
  - no need to try and keep all options open with excessive "if possible" or "maybe" or "no one knows where the future will go"

- **Don't underestimate your current skills!**
  - Think creatively about what you've really learned

Soft skills

- **Soft skill descriptions:**
  - "I have years of experience working in teams"
  - "my experience…has given me the ability to adapt quickly"
  - "By helping other students…I have learned to work well with others and encourage them to do their best"
  - "I prefer to be out of the spotlight"
  - "I communicate very well"

STRONGER
WEAKER

Writing technicals

- Some things to keep in mind…
- **Length of sentences** (*"It was the best of times, it was the worst of times…"*):
  - Avoid being "Dickensian"! More than ~2-3 commas? New sentence
  - PIs will read tons of these! Don't be know as the one with crazy sentences.
- **In-group language**: jargon and acronyms alienate a reader
  - Jargon: "I have *a heart for* people", "invest in people and *love on them*"
  - Acronyms: "I used BBB (blah blah blah)" → "I used blah blah blah (BBB)"
- **Prepositions**: NOT AT THE END OF A PHRASE
  - Search for "at.", "of.", "with." in your document and move them
- **Uber-adjectives**: be confident but also realistic. *"There is no job I am incapable of performing extremely well"*
- **Proofread**: *"I'm a student at bethel university"* …

Example: Dr. Lemke

Read Dr. Lemke's personal statement!

Box off "Who are you?" statements
Box off "Soft skills" statements

What is he sharing in the non-boxed statements?

Example: Dr. Lemke

self / goals experiences / skills soft skills

I intend to study optics or laser/atomic physics at Colorado. My experiences in this field includes research at NIST (Boulder) in the Time and Frequency Division, interning with Honeywell Aerospace in the Ring Laser Gyro Design Engineering group, and research done at Bethel with Dr. Richard Peterson, both in class and over the summer.

My work at NIST during the summer of 2005 was with the Student Undergraduate Research Fellowship program. I worked in Dr. Leo Hollberg's group, known as the Optical Standards Group, building an optical atomic clock based on laser-cooled Ytterbium atoms. My part of this large project was to frequency-characterize and -stabilize the laser that will serve as the local oscillator in the clock. Through this summer research, I gained much experience working with laser-cooling and trapping, laser linewidth measurements, feedback stabilization methods, and general optics and physics lab skills. Additionally, the summer showed me what physics research looks like in a professional research lab, and energized me to pursue research in graduate school.

Example: Dr. Lemke

I spent my junior year (including one summer) working at Honeywell in Minneapolis with the ring laser gyro design team. My role was with the life team, working to design a longer-lived laser. Some of my duties included basic intern tasks (data acquisition and presentation) but many of them allowed me to get into the lab to conduct my own experiments. The most significant project I conducted was to monitor the spontaneous emission of the laser as a function of run current and gas mix ratio. While at Honeywell, I was able to learn about laser physics, develop skills of data interpolation and presentation, learn about working in an applied physics industry, and improve my oral communication skills by giving talks to teams of scientists and engineers about my projects. I left Honeywell to pursue my fellowship at NIST.

I have taken two courses at Bethel in my chosen field: Optics and Lasers. In the traditional Optics course, my semester-long project involved heterodyne interferometry of an expansion tube (or "ping-pong cannon"). The interferometer was used to track the rapid pressure change as a function of time near the end of the tube. Some of the work done in this course led to a month-long summer project that I was involved in, and it included such things as pulsed-Schlieren photography of the same expansion tube. In addition to these projects, I also performed a shorter project dealing with time-average holography of a resonating organ pipe. In the Lasers course, my project involved taking high-speed photographs and shadowgraph images of moving bullets with a pulsed-dye laser as the light source. Other lab exercises in this course included aligning the mirrors on a homemade Helium-Neon laser and using a scanning Fabry-Perot cavity to diagnose the mode spacing and fast linewidth of a laser.

Example: Dr. Lemke

My plans for grad school are to pursue a Ph.D. in optics or atomic physics. Initially, I would welcome a teaching assistantship (I have served as an undergraduate teaching assistant at Bethel for 3 years), but ultimately I would like to find an interesting research project, and there are plenty such projects at CU that I think are very fascinating. *My career goals are, like many individuals', a bit uncertain.* I do have an interest in working with students as a teacher, but I have a greater interest in working in research, especially in an applied physics industry. Thus, I have chosen to pursue the industrial researcher track *for now*, and optics is my industry.

- He has lots more blue than green or orange! Your statements will start off heavier on the green/orange and transition over time toward blue.
- Class projects are a significant facet of his experience
- He makes all the discussion of classes and internships point in the same direction, toward his goal for graduate school

Assignment

- ~1000 word personal statement
- Due 10/21 (2 weeks) on Moodle
  - Choose "cover letter" format if you wish

10 pts:
- Who are you?
- What are your main interests?
- Why are you fascinated with science/physics?

15 pts:
- 5-10 years from now, what sort of job do you want?
- How do you see yourself getting there? (experiences)
- What skills or abilities do you have that will help you succeed?

5 pts – Soft skills: teamwork, leadership, relating to people, handling ethical issues

5 pts – Writing technical, ease of reading

- Plus extra paragraph:

5 pts – How do think about career as a calling integrated with faith?