



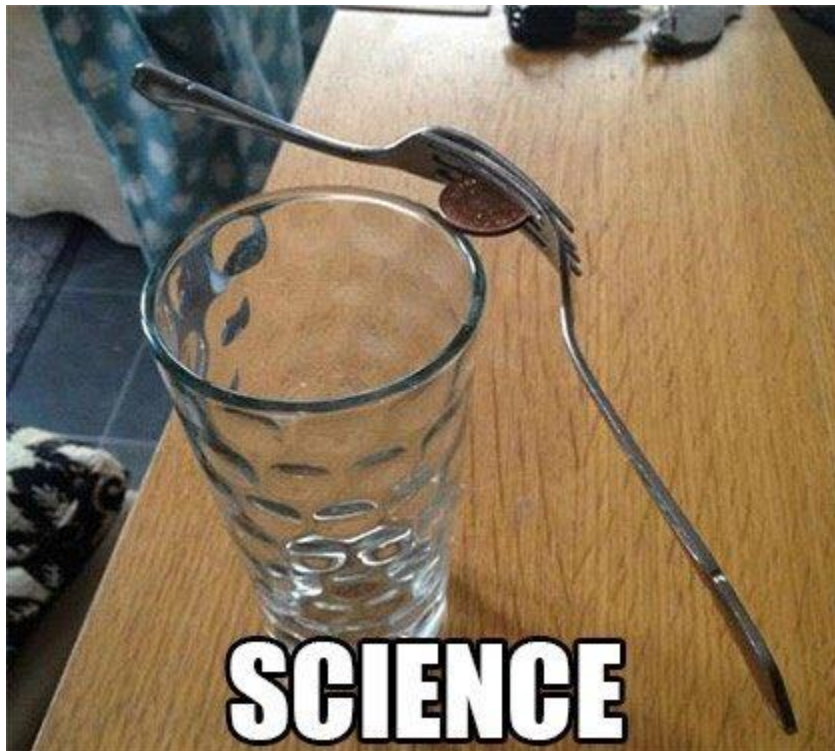
BETHEL
UNIVERSITY

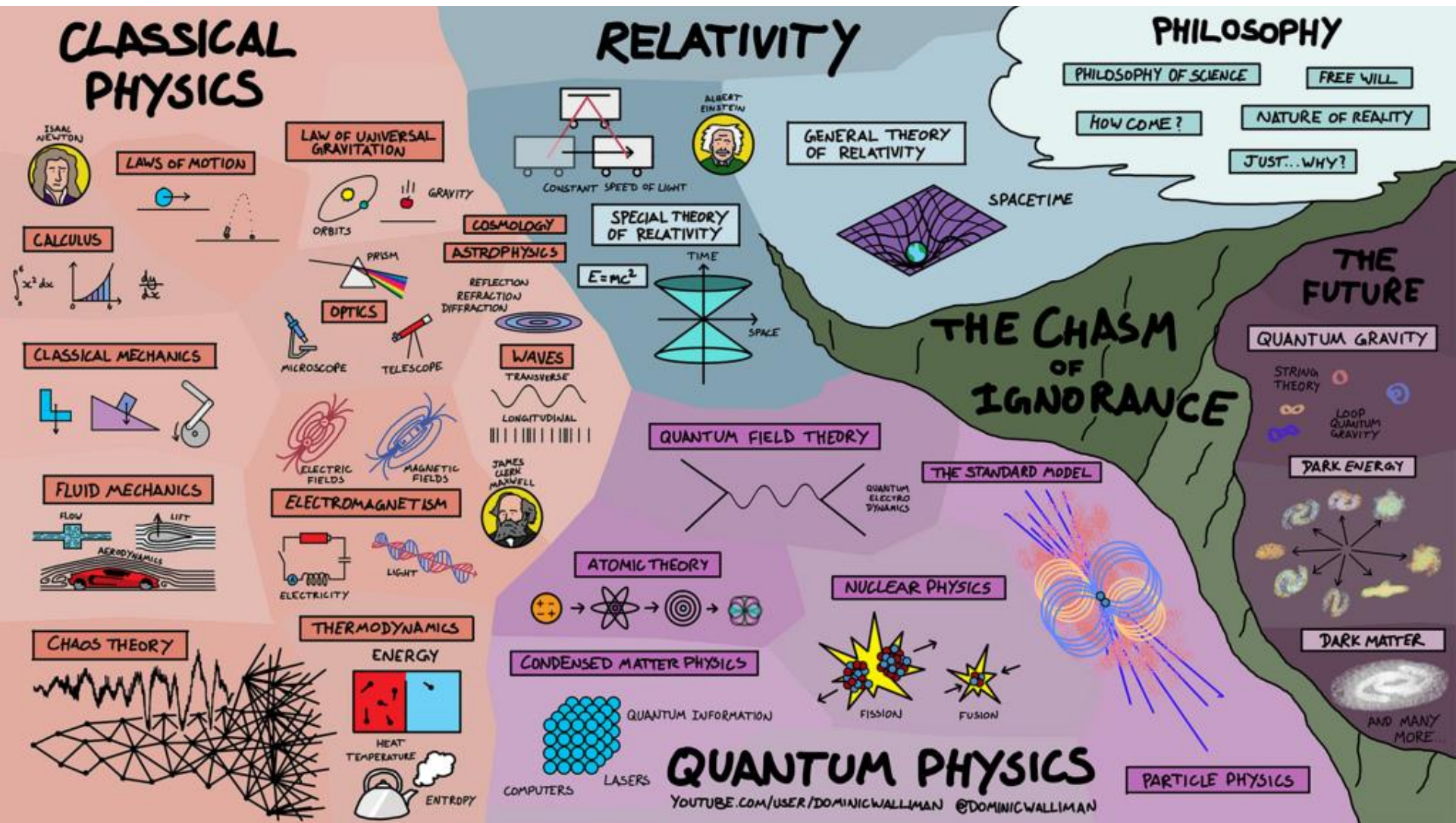
Networking & Resumes

JULIE HOGAN

6/26/23

- ▶ Connecting academic fields to job titles
- ▶ Connecting job postings to hiring strategies
- ▶ Why networking?
- ▶ Updating your resume







► Academia:

Undergrad

Grad
student

Post-
doctoral
researcher

Faculty
member

- Many options for transitions out after any level on this track

► Government (ex: Fermilab):

Post-doctoral
researcher

Associate
Scientist

Scientist
1

Scientist
2

Scientist
3

- Job description will include the type/category of science

- ▶ Industry: searches for “physics” will often return post-PhD job options
 - ▶ Ex: Honeywell career site, search “physicist”
 - ▶ Notice these jobs are posted in the “engineering” category on their search site!

Atomic Physicist - Honeywell Quantum Solutions

Engineering | req220131

Job available in 2 locations ▼

Our outstanding team of scientists and engineers leverages expertise in complex hardware and software control systems, advanced optics and lasers, magnetics, cryogenics, atomic physics, and ultra-high...

Master's, not PhD!

Advanced Physicist - Cryogenics

303 S. Technology Ct., Broomfield, Colorado, 80021, United States | Engineering | HRD96071

When you join our team, you will be working to design and build systems with world leading performance, such as best-in-class environmental controls including, state-of-the-art low and ultra-low temperature...

Physicist/Mathematician - Honeywell Quantum Solutions

303 S. Technology Ct., Broomfield, Colorado, 80021, United States | Engineering | req224481

You will have an understanding and experience in quantum circuit analysis, quantum error correction and computational approaches & optimization problems for a variety of different applications. In this...

- ▶ Engineering jobs are also usually not coded to the name of your degree!

Sales Engineer

- Works directly with customers to understand their project
- Creates initial specifications in order to offer a price quote to customers
- Lots of variety – the details and “doing” are passed on to others

Applications Engineer

- Design products
- Analysis-heavy: simulation of solids, fluids, electronics, etc, to support product design

Design/Process Engineer

- Create specific design details for elements of a product
- Create the manufacturing specifications and procedures

Manufacturing Engineer

- Maintain equipment required for manufacturing products
- Design new equipment (or improve existing) for new projects

Quality Engineer

- Perform statistical analysis for correctness and consistency of manufacturing
- Improve processes or implement controls to ensure consistent quality

Research & Development Engineer

- Develop new ideas for products or technologies
- Implement new technological advances into existing products

- ▶ Engineering progression
 - ▶ Basic idea – every company will differ

Technician (no
college degree)

Junior (no-
label) / 1

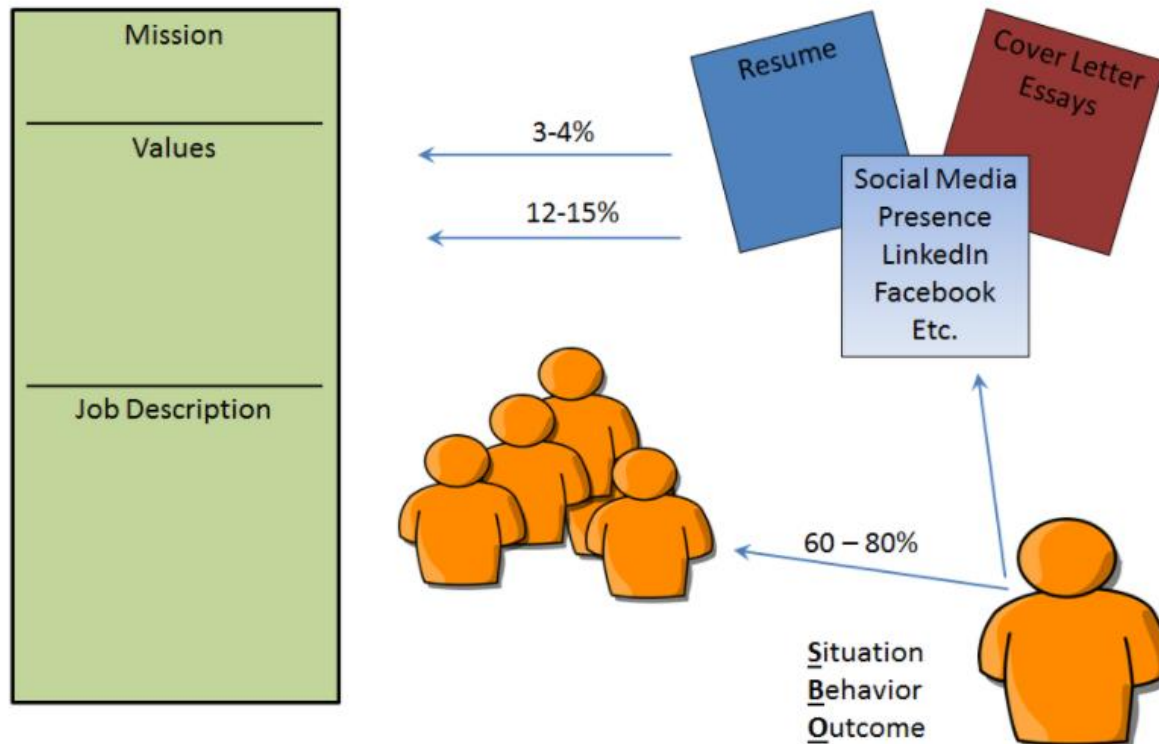
Advanced /
2

Sr
Advanced /
3

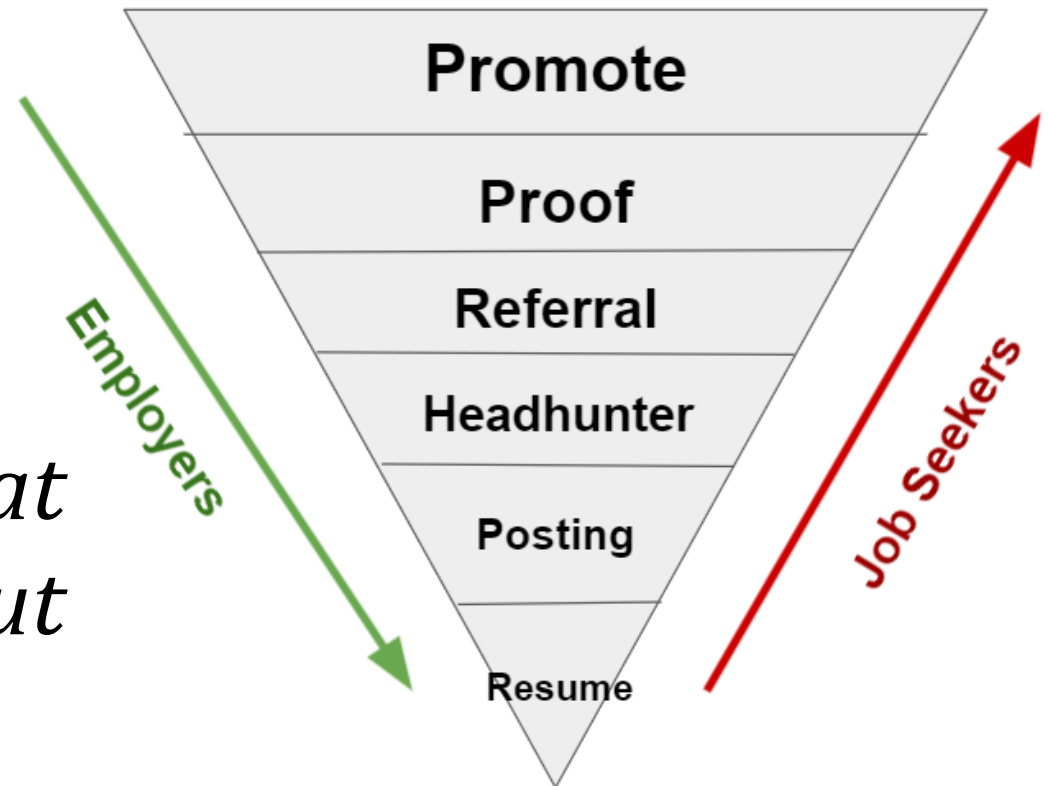
Senior / 4

- ▶ Management vs Engineering tracks

- ▶ **History is the best predictor of future success**
- ▶ Employers create job descriptions from their mission & values
- ▶ They want to know how your experiences align with their needs

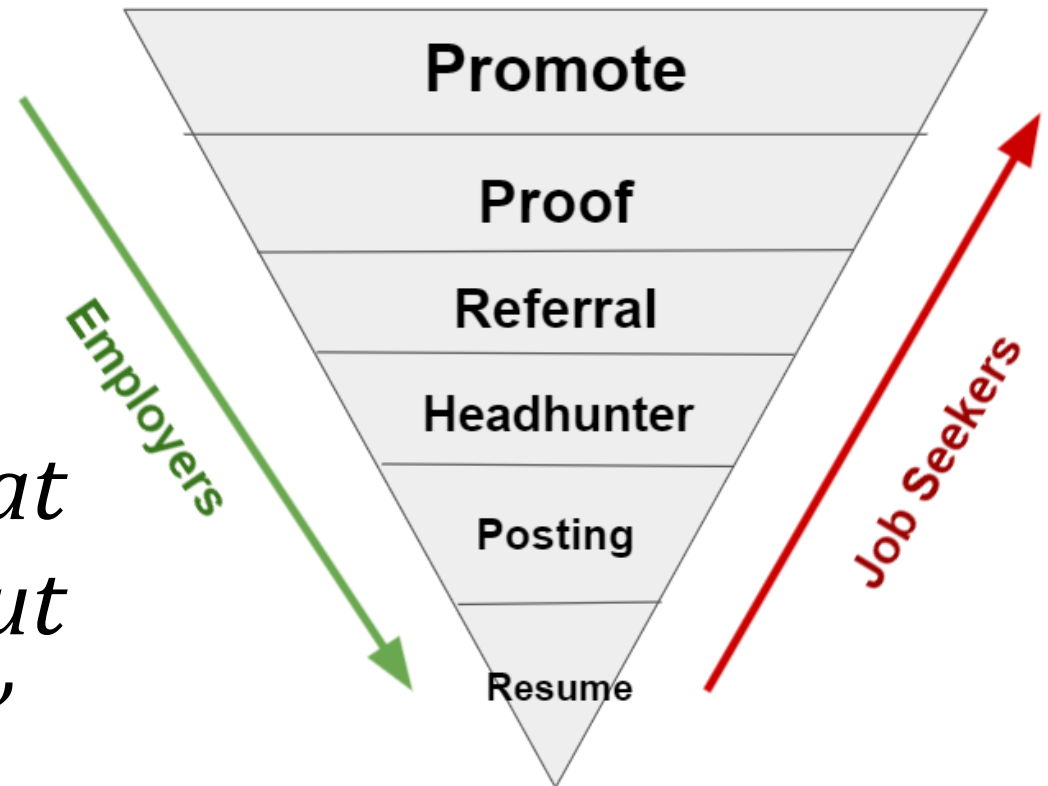


- ▶ Companies don't want to post jobs!!
 - ▶ Costs \$\$!
 - ▶ Costs time!
- ▶ Referral bonuses



“It’s not about what you know, it’s about who you know”

- ▶ Companies don't want to post jobs!!
 - ▶ Costs \$\$!
 - ▶ Costs time!
- ▶ Referral bonuses



*“It’s not about what you know, it’s about who **knows you**”*

- Talk to people about your job hopes!
- School, hobbies, volunteering, **parents**

Internal

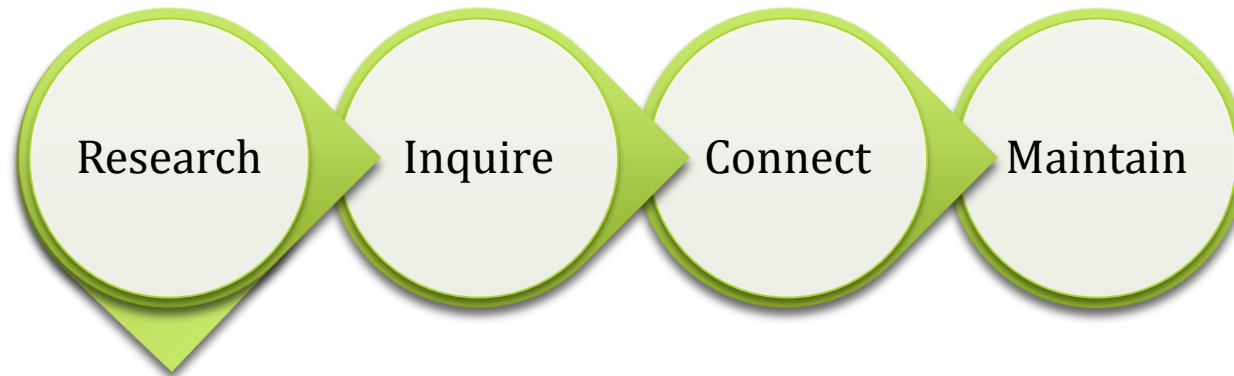
- LinkedIn
- Social media
- Contact info on job postings or company webpages

Online

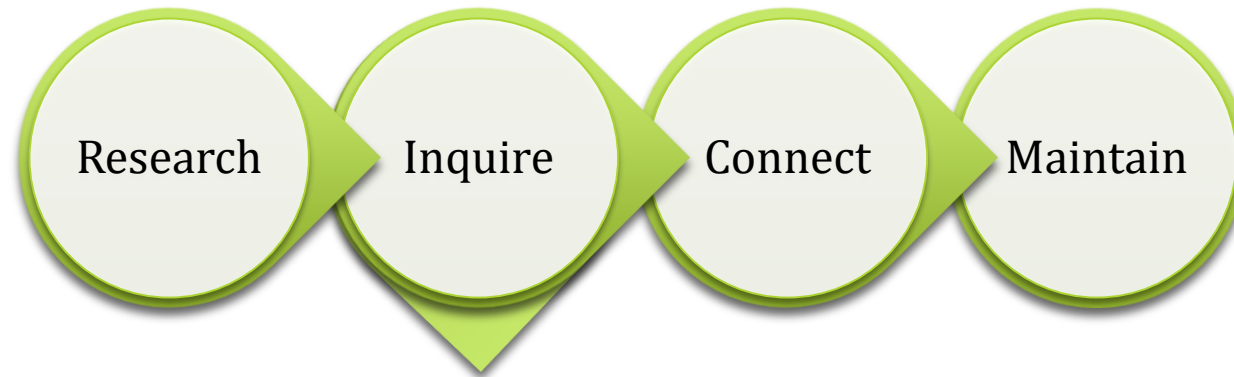
- Job fairs
- Campus events
- Community events
- Conferences

Events

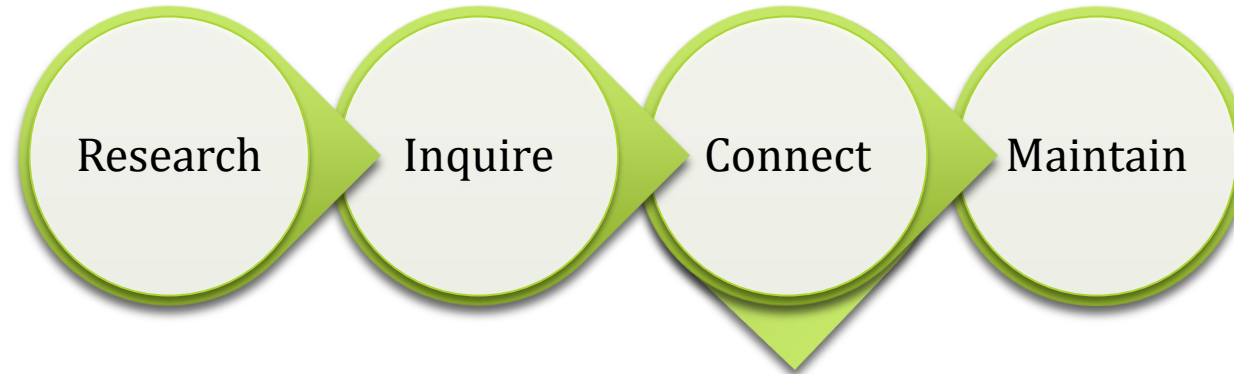
***How many people do you know?
Who has the biggest “internal”
network?***



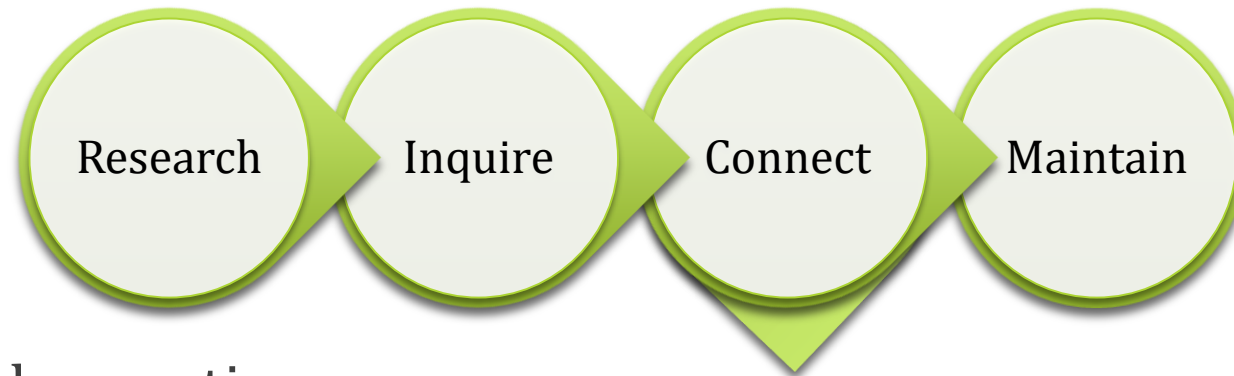
- ▶ <https://www.onetonline.org/>
 - ▶ Compendium of info and statistics on many many job titles
- ▶ <https://www.linkedin.com>
 - ▶ Search school alumni, or by association with CERN, Fermilab, particle physics, etc
- ▶ Graduate school “research” pages (physics, ECE, biosciences, etc)
 - ▶ Find info on faculty members, research projects, current students



- ▶ Assessor versus Ally strategy
- ▶ “Can you get me a job at your company?”
 - ▶ Casts this connection as an **assessor**
 - ▶ They are more defensive, given role of judging you
- ▶ “Can you tell me a little about your job/company?”
 - ▶ Casts this connection as an **ally** – no immediate “ask”
 - ▶ Gets them talking about themselves

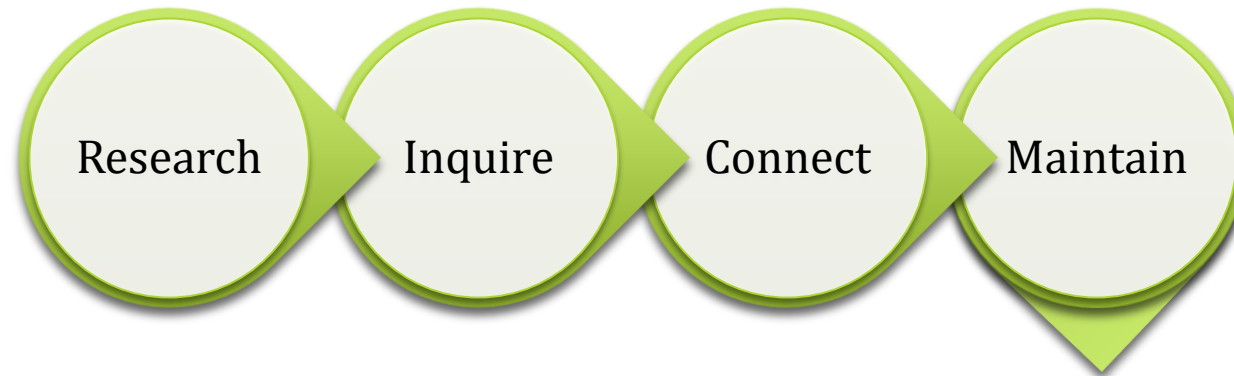


- ▶ Informational interviews
 - ▶ Have a conversation with someone in a job/field that interests you!
- ▶ Know your objective: have tailored questions for this person
- ▶ Keep it professional: not coffee with a friend, networking!
- ▶ Keep on target: respect their time with questions that fit in ~30 minutes (unless they volunteer more time)



▶ Example questions:

- ▶ Would you tell me your story? How did you get here professionally?
- ▶ How does your job relate to your training in school?
- ▶ What do you do on a typical day?
- ▶ Can you describe some of your projects and the tools/techniques?
- ▶ What do you like best/least about your job/company/field?
- ▶ What has been the hardest thing to learn in your position?
- ▶ What advice would give someone in my position? Any pitfalls to watch out for?



- ▶ May I stay in touch with you periodically?
- ▶ Would you recommend anyone else I could meet to hear their story?

- ▶ After your connection: **THANK THEM!**
 - ▶ Email is fine
 - ▶ Follow through on following up

▶ **Your resume communicates your “brand” to the world**

▶ Contact information

▶ Skills

▶ Education

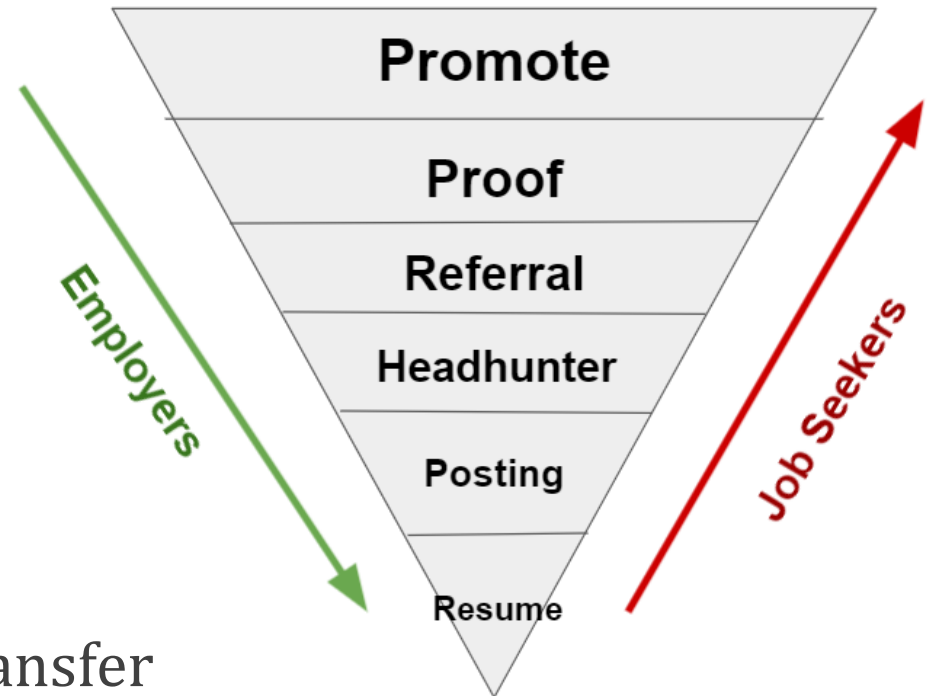
▶ Job experience

▶ Other experience

▶ Goal is FAST information transfer

▶ Pass the computerized keyword search!

▶ Make sure a 30-second glance shows someone the highlights



- ▶ **Your resume communicates your “brand” to the world**
- ▶ On Indico:
 - ▶ General example
 - ▶ Science-specific example
 - ▶ My old resume!

**What common formatting features
do you see in the examples?**

▶ Your resume communicates your “brand” to the world

▶ Contact information

- ▶ NAME! Biggest thing they see
- ▶ EMAIL!
- ▶ LinkedIn, etc
- ▶ Phone
- ▶ Location (not full address)

First Name Last Name

St. Paul, MN • 651-638-0000 • student@bethel.edu • LinkedIn URL

First & Last Name

St. Paul, MN • 651-000-0000 • student@bethel.edu • LinkedIn URL

Science Student

St. Paul, MN • 651-638-1000 • student@bethel.edu • LinkedIn URL

Julie E. Managan

~~1588 Harlan Drive~~, Danville CA, ~~94526~~ • (925) 708-2108 • julie.e.managan@vanderbilt.edu

▶ Your resume communicates your “brand” to the world

▶ Contact information

▶ Skills

▶ From courses?

▶ From hobbies?

▶ From jobs?

RELATED COURSES:

Media Communication

Group Communication

Ethics: Theory & Practice

Advanced Public Speaking

Organizational Communication

Social & Political Philosophy

CAREFUL!!

Profile:

- Career Goal: graduate study leading to research position in particle physics
- Research skills: ROOT program, data logistics, material property simulations
- Computer skills: Unix. C/C++. Perl. grid computing (PBS)

Skills

- Extensive leadership experience resulting in stronger team and individual performance.
- Strong written, oral, and interpersonal communication skills as shown through a marketing internship.
- Highly effective critical thinker and team member developed by three years retail sales experience.

Beware of jargon!

Hi (Bethel Prof) –

Just wanted to give you some feedback – we did get several applications from Bethel students, so wherever you announced/posted had some impact. Thanks for that!

It might be good to also let them know they have resources at Bethel to help them with resumes ... I can certainly relate what it's like to be someone who has to read over a stack of resumes in a short amount of time and pick only one or two to recommend... But certainly **let them know that a list of courses at Bethel isn't really sufficient** – they have to **point out what skills or knowledge** they have that **applies to the posting.**

(3M manager)

▶ Your resume communicates your “brand” to the world

▶ Contact information

▶ Skills

▶ Education

- ▶ University & location
- ▶ Anticipated graduation
- ▶ GPA (unless it’s poor...), perhaps honors

Education:

- Vanderbilt University, Nashville TN
College of Arts & Sciences
B.A. in Physics, 2009
Honors in Physics, *summa cum laude*
Minor: General Music

EDUCATION

Bachelor of Science in Biochemistry

Bethel University, St. Paul, MN

GPA: 3.9, Summa Cum Laude

Honors:

Dean’s list past 4 semesters

Sigma Zeta (Science Honors)

Tri Beta (Honor Society for Biology and related majors)

Phi Theta Kappa (Honor Society for college juniors)

Anticipated Graduation: May 2018

Education

Bachelor of Arts in Business, Emphasis in Marketing

Bethel University, St. Paul, MN

- Minor in Psychology

Expected Completion: May 2023

▶ Your resume communicates your “brand” to the world

▶ Contact information

▶ Skills

▶ Education

▶ Job experience

▶ Where, when

▶ Bullets for responsibilities

▶ ACTION WORDS

▶ BE SPECIFIC

Teaching Assistant, Philosophy Dept, Bethel
2019

- Created an organizational system to ef
- Graded, cataloged, and sorted student
- Planned class discussion questions and

Resident Assistant, Bethel University | St. Paul, MN

September 2019 - May 2020

- Provided counseling, mediation, and friendship for 30 freshman and 10 sophomore women
- Coordinated group of 250 people and small group of 30 in educational activities and social events
- Developed time management, prioritization, and team-building skills
- Assessed spiritual, social, educational and physical needs of residents; encouraged, confronted, redirected

▶ Your resume communicates your “brand” to the world

▶ Contact information

▶ Skills

▶ Education

▶ Job experience

▶ Where, when

▶ Bullets for responsibilities

▶ ACTION WORDS

▶ BE SPECIFIC

Teaching Assistant, Philosophy Dept, Bethel **2019**

- Created an organizational system to ef
- Graded, cataloged, and sorted student
- Planned class discussion questions and

Sales Intern, Beth E.L. Products, Inc., St. Paul, MN

May 2017 - May 2018

- Co-led a team that facilitated product price adjustments to increase revenue by 10% and decrease expense costs by 5%.
- Collaborated as a team member in marketing development and implementation of new products.
- Researched marketing trends in social media, such as Facebook and Twitter.
- Implemented a new accounting system to facilitate in-depth up-to-date reporting.
- Worked with a team on two \$20,000+ projects in order to purchase, prepare, and more efficiently manage sales products.

▶ Your resume communicates your “brand” to the world

▶ Contact information

▶ Skills

▶ Education

▶ Job experience

▶ Other experience

▶ **ENGINEERING!!**

▶ **PHYSICS!!**

▶ Volunteering, etc

Research Experience:

- Vanderbilt University – *High Energy Physics group* 2007 – 2009
 - Optimized the REDDnet data logistics network for the CMS Tier-3 data center at Vanderbilt.
 - Learned about the challenges of “big data”, using grid computing systems, and the ROOT software program.
 - Three weeks at CERN as part of the McMinn Scholarship.

- Lawrence Livermore National Laboratory – *Beam Research group* 2007
 - Modeled surface flashover of annular dielectrics in high gradient electric fields for development of the Dielectric Wall Accelerator, a compact accelerator designed for proton radiation therapy.
 - Presented a research poster at LLNL undergraduate poster session.

Publications:

- J. R. Harris, D. Blackfield, G. J. Caporaso, Y. J. Chen, S. Hawkins, M. Kendig, B. Poole, D. M. Sanders, M. Krogh, and J. E. Managan, “Vacuum Insulator Development for the Dielectric Wall Accelerator”, *J. Appl. Physics* **104** 023301 (2008).

- J.E. Managan and J.R. Harris, “Simulation of Electron Trajectories Inside an Annular Dielectric”. *U.S. Dept. of Energy Journal of Undergraduate Research* **8** (2008), 252.

RELATED EXPERIENCE

Lab Technician

Biochem, Inc., St. Paul, MN

- Conduct a variety of experiments and tests to determine product safety
- Generate lab samples for evaluation
- Assist on project to reduce impurities in experimental sanitizing agents

▶ Your resume communicates your “brand” to the world

▶ Contact information

▶ Skills

▶ Education

Leadership • Victory A Cappella choir, Musical Director
Experience: • National Honor Society Member

▶ Job experience

▶ Other experience

▶ ENGINEERING!!

▶ PHYSICS!!

▶ Volunteering, etc

Campus & Community Involvement

President - Bethel Business and Economics Association

Captain - Bethel University Soccer Team

Volunteer - Habitat for Humanity, Minneapolis, MN

CROSS CULTURAL EXPERIENCE

Youth Advisor, Teen Ministries | Cape Coast, Ghana

- Led and directed two small groups of 10 teenage students

- ▶ How will you add this summer's experience to your resume?
- ▶ Skills you're building?
- ▶ Techniques you're learning?
- ▶ Bullet point descriptors?