

Job Search Guidebook:

How to find a job at a for-profit organization



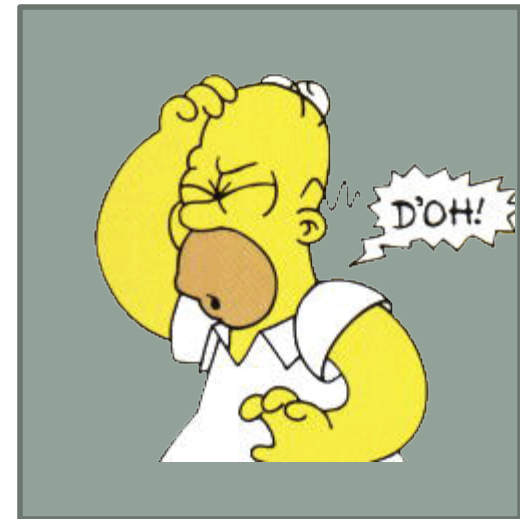
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John Challis

Archimedes, Inc.

Motivation

What did I learn on my job search that I wish I had known at the beginning?



Key Takeaways

1. Questions you need to answer:
 - What are my professional goals?
 - Can I achieve my goals at a for-profit?
 - How do I land my first role out of school?

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2. Seek out opportunities:

- Network (~ 60%)
- Research potential opportunities (~30%)
- Interview Preparation (~10%)
- Expect to spend 10-20 hrs/wk on job search

3. Things to consider:

- Industry
- Organization
- Role

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5. Expect failure and keep a positive attitude.

Advantages for physicists

- Quantitative ability
- Ability to structure and solve complex problems
- Ability to write numerically intensive programs
- Self-teaching ability
- Intelligence
- Ability to handle punishing workloads for low pay

Potential disadvantages for physicists

- Lack of experience in a for-profit setting
- Overqualified for entry-level positions
- Underqualified for mid-level positions
- Not used to presenting themselves in interview setting
- Little experience working in teams
- Culture shock

Background: For-profit organizations

- For-profit organizations aim to create value for their customers and make significant financial returns for their owners and shareholders.
- These organizations all hire physicists:



Physicists in for-profit organizations



McKinsey&Company

Think in a structured way through strategic problems at Global 1000 Companies.



BARCLAYS

Structure and value complex financial instruments including derivatives, options, and exotics.



ARCHIMEDES
Moving Medicine through Mathematics

Build models of human disease that allow computer simulations of clinical trials.



imagination at work

Industrial research including novel materials, turbulence, computationally intensive modeling.



facebook

Design algorithms to target advertising using social media.

What are my professional goals?

Working backwards from your goals is easier than working forwards from where you are.

- Where do you see yourself in 5 years?
- What do you want to be doing in 10 years?
- If you could have one significant and enduring professional achievement, what would it be?

Can I achieve my goals at a for-profit?

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 - Types of roles and career paths
 - Geographic locations
 - Opportunities for growth
 - Resources
 - Responsibilities
 - Lifestyles

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Could I realize my goals at a for-profit?

Absolutely.

Comparing academia and for-profits

Aspect	For-profit vs academia (generalization)
Work intensity	For-profits are higher intensity.
Project cycles	For-profits have shorter project cycles.
Flexibility	For-profits have less flexibility.
Responsibility	For-profits have more responsibility.
Pay	For-profits have more pay.
Resources	For-profits have more resources.
Tangible Outcomes	For-profits have a greater focus on tangible outcomes.
Job Security	For-profits tend to have much less job security.

Where do I begin

- Exploring possibilities
 - Do you want to work in a for-profit?
 - Where do you fit?
- Networking
- Research potential opportunities
- Use all available resources.

Networking Basics

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- Make initial contacts in target industries and orgs through:
 - Friends and family
 - Alumni (Yale / undergraduate)
 - LinkedIn Groups
- Recent graduates from your department can provide particularly helpful insight.
- Use new business contacts to make further contacts.

Making a contact – Don't be shy.

- Find someone whom you want to contact for their advice.
- Send them an introductory e-mail :
 - What do you want to learn about their industry or org
 - Stress that you are seeking information
 - Offer to do meeting either on phone or in person
 - Offer your contact info and suggest times to talk
- Keep the conversation to 30 minutes or less. Organize questions ahead of time.
- At conclusion, ask if okay to stay in touch
- Send either a written or e-mail thank you note

What not to do

- Ask questions you can find on Wikipedia
- Ask questions far outside their expertise
- Ask questions so fast they cannot answer.
- Pretend to be someone you are not.
- Make promises you can't keep.

Referrals

- A large fraction of positions are never posted.
- Referrals are very important.
 - Employees receive incentives to make referrals.
 - Applicants with referrals are most likely to be interviewed.

Yale resources

- Yale Career Center and e-mail.
 - Receive individual attention
 - Practice mock interviews
- Consulting club
- Job fairs, on-campus visits and interviews.
- Professional groups
- Yale classes
 - SOM
 - Other academic departments

Online Resources

Job Bulletin boards

Craigslist : [http:// <city>.craigslist.org](http://<city>.craigslist.org)

Indeed.com: <http://www.indeed.com/>

New investment: <http://www.pehub.com/>

LinkedIn: <http://www.linkedin.com/>

Alumni Network:

<http://www.alumniconnections.com/olc/membersonly/YALE/networking>

Reading

Economist <http://www.economist.com/>

WSJ <http://online.wsj.com/home-page>

FT <http://www.ft.com/home/uk>

Compensation

Glassdoor <http://www.glassdoor.com/index.htm>

Books

The 10-day MBA: A Step-by-step Guide to Mastering the Skills Taught in Top Business Schools

<http://www.amazon.com/10-day-MBA-Step-step-Mastering/dp/0749914017>

Case in Point: Complete Case Interview Preparation 10th Anniversary Edition

<http://www.amazon.com/Case-Point-Complete-Interview-Preparation/dp/0971015848>

Researching potential opportunities

- When networking, listen carefully for potential opportunities. Proactively seek more information.
- Review the online posted job review boards. LinkedIn, indeed, craigslist, etc.
- Look for an organization's own careers page.
- If an organization does on-campus recruiting (most do not), follow their process carefully.

Applying – Is this role for me?

- Do I want this position and would I consider accepting if it was offered to me tomorrow?
- What is the potential outlook for this organization and industry:
 - Scan the internet, major newspapers, etc.
- Am I willing to make the sacrifices succeed at this job:
 - Stress
 - Geography
 - Work hours
 - Travel

Applying – Networking.

- To prepare yourself for the interview speak to current and former employees.
 - Where does this role fit in the overall picture?
 - What would an employee have wanted to know when they started
 - What is it like to be an employee at this organization
 - Lifestyle
 - Culture
 - Support and resources
 - Diversity : gender, race, science-background, background
- When possible, apply through a referral. You will have a better response.

Applying – Cover Letter.

When writing a cover letter:

- If allowed, mention the person you spoke with about the organization.
- Why are you a good candidate for this position? Highlight specific lines from your resume.
- Why are you excited about this role and organization?
- You are willing to move to the location of the role.

Applying -- Resume

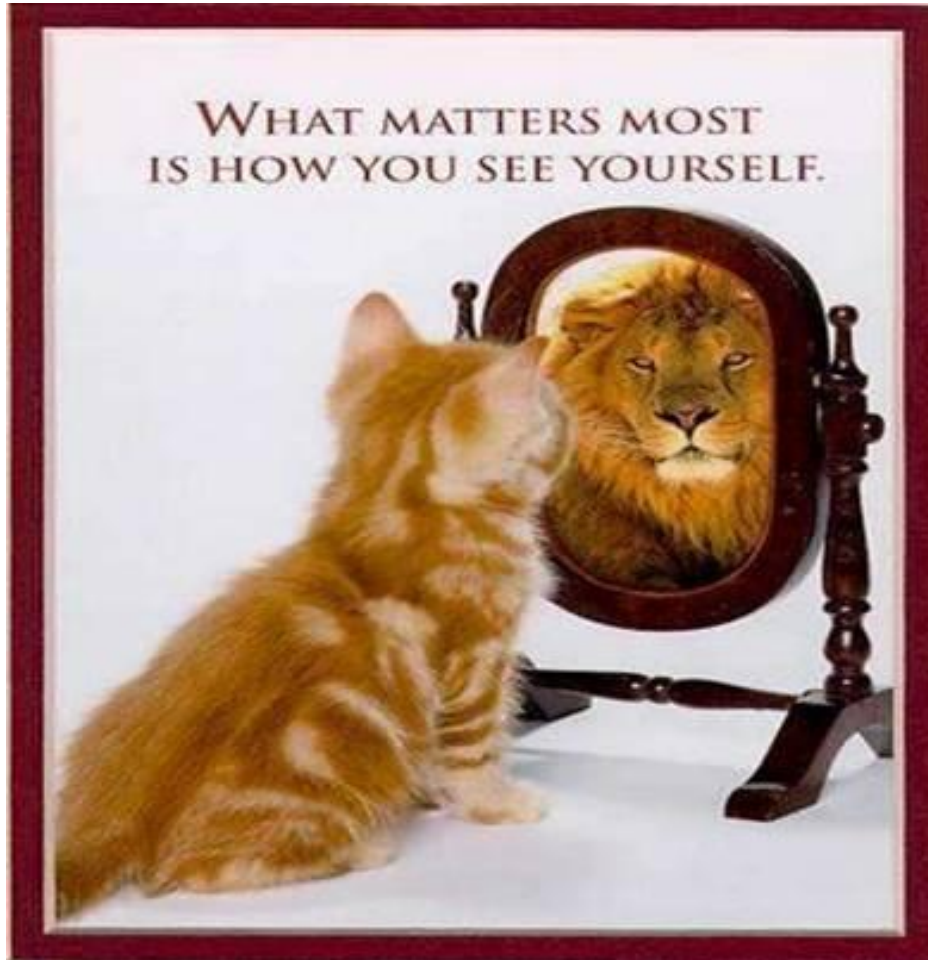
When writing a resume

- When writing a resume, use the internet to find good examples. Copy their templates with absolutely no shame.
- Tailor the resume to the role.
 - Consulting resumes look very different from software engineer resumes.
 - Highlight skills sought in a role.
- Make as concise as possible.
- No punctuation or spelling errors.

Applying -- Interviewing

- Try to relax (very difficult).
- How will the interview be conducted:
 - Brain teasers
 - Case interview
 - Skills test
 - Give a presentation
 - Fit test
- Everybody is evaluating you from the secretary to the person you have lunch with to the executives who interview you. Each is evaluating something different.
- Send thank you notes.

Example: Jack's Job Search



Job search metrics

Job search metrics

- Two year job search
- Applications to over 200 opportunities
- Phone conversations with over 100 individuals
- Interviews for six roles in 2008-2009
 - Consultant at the two leading management consultancies
 - Risk analyst at a major catastrophic risk modeler (2 roles)
 - Scientist at Archimedes (2 roles).
- One offer at Archimedes, my dream job which satisfies all of my professional goals.

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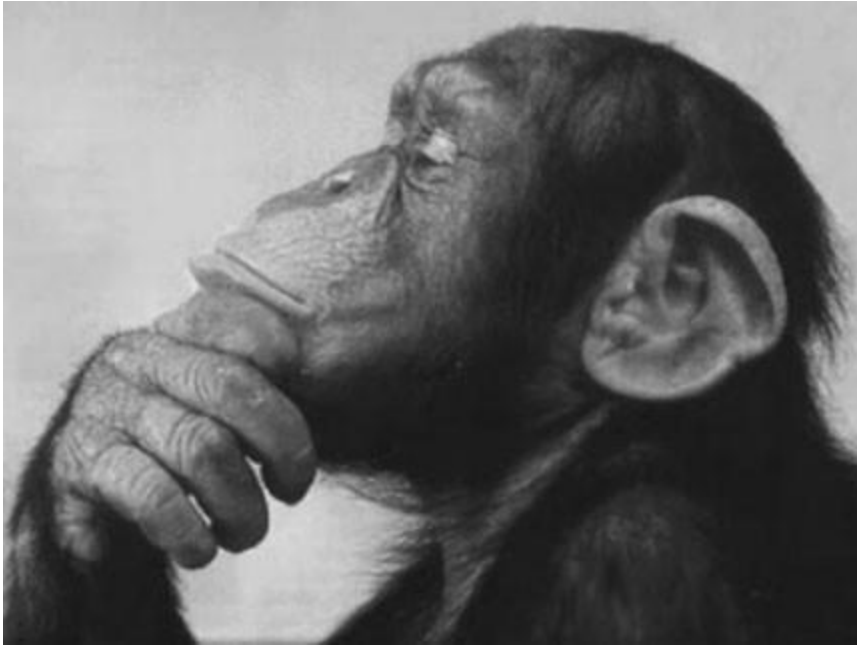
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5. Call back interview for second role.
6. Received offer and accepted.

Things to consider



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- Focus your search on a few industries. Consider your professional goals.
- Educate yourself on key terminology and concepts.
- Read business literature
 - Wall Street Journal
 - Financial Times
 - Economist
 - BusinessWeek

Things to consider -- Organization

- Size

Aspect	Small vs big orgs
Rate of change	Small orgs tend to be more dynamic.
Intensity	Small orgs tend to have higher intensity.
Variety	Small orgs tend to offer more variety.
Resources	Small orgs tend to offer fewer resources.
Structure	Small orgs tend to offer less structure.
Growth	Small orgs tend to offer more opportunity for growth.
Pay	Small orgs tend to offer less pay.

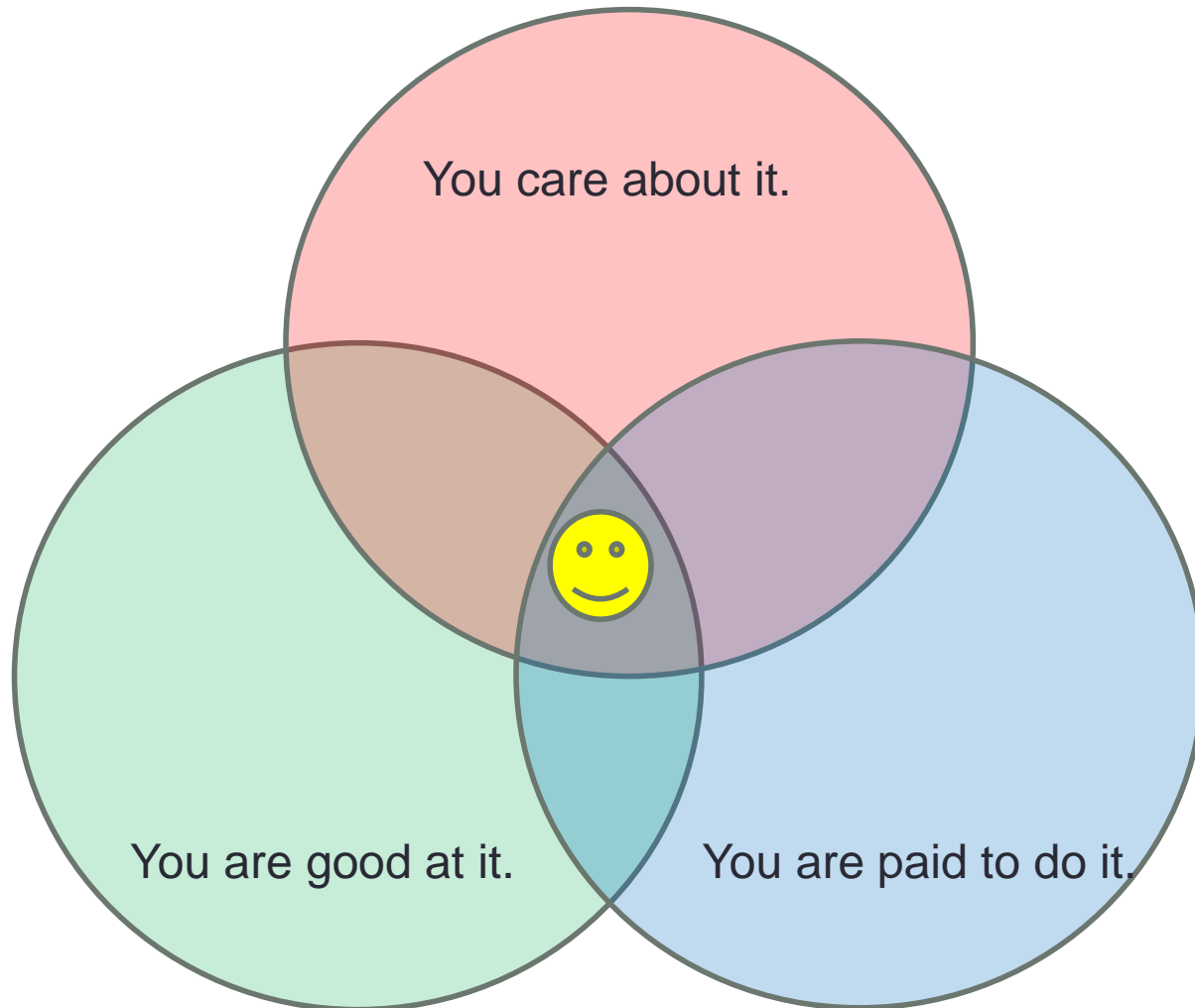
Things to consider -- Organization

- Size
- Could you see yourself here for 5-7 years?
- Culture
 - Do people feel valued in the org?
 - What do individuals who have left the org say?
 - How many employees at your level and above come from a physics background?

Things to consider -- Role

- Are you willing to give 50-60 hours/week to this opportunity?
- Does this role mesh with your career plans on mid- and long-term basis?
- Does it at least satisfy two of the following:
 - Something you care about
 - Something you are good at
 - Something that will pay you to do it.

Aim for a career



Expect failure and keep a positive attitude.

Summary

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- Network. Use contacts to introduce you to their contacts. Iterate.
- Be proactive in seeking out opportunities.
- Aim for a career that you care about, you are good at, and will pay you to do it.

Questions

- How did you go about narrowing down career options?
- What criteria did I use to choose careers to focus on?
- Did you apply to every available job opening?
- What is the interview process like?
- How many hours are you expected to work per week?
- Is your environment friendly to a youngish PhD?
- What skills can someone with a PhD in physics offer? How much are these related to the core education?

Questions

- Are mathematicians more desirable than physicists for the financial sector?
- Is there a universal characteristic of all job interviews?