

# 45 Ways to Activate Your Data Science Career

We asked our LinkedIn group members what their greatest challenges were to becoming fully fledged data scientists. Some of the most common frustrations were:

- · Not knowing where to begin
- · A lack of experience
- · An inability to form networks
- · Difficulties in contacting the right people

In response, we rounded up 45 of our favorite ideas from our SuperDataScience podcast guests to (re)activate your career.

Many of the experts quoted here will be at our event, <u>DataScienceGO</u>. For a chance to pick their brains, join us on November 10–12, 2017, in San Diego!

# When you're getting started

#### Learn

- 1. **Give yourself time.** Kimberly Deas recommends taking a year to learn the tricks of the trade in data science, beginning with a script like C++ to get used to the syntax of programming, and building from there.
- 2. **Read!** We had many recommendations from our podcast guests and we can't list them all, but here is a handful:

- · The Signal and the Noise, Nate Silver
- · Big Data: A Revolution That Will Transform How We Live, Work, and Think, Viktor Mayer-Schönberger and Kenneth Cukier
- · Moneyball: The Art of Winning an Unfair Game, Michael Lewis
- · The Future of the Mind, Michio Kaku
- · Dataclysm, Christian Rudder



3. **Mix up your learning avenues.** With monotony comes boredom. Take online courses? Try subscribing to a journal. Only read textbooks? Why not listen to podcasts on your way to work? <u>Learn from others</u> who have been where you stand!

### **Practice**

- 4. **Don't get caught up in theory**, apply what you've learned to real-life experiences. Emma Whyte did so when analyzing data of her physical training sessions.
- 5. **Train with Excel.** For beginners, Chris Dutton says Excel is a great way to master the fundamentals of data science because you can see how you are manipulating your data as you work with it.

- 6. **Start with Python** *or* **R.** Most of our podcast guests had a preference. If you're in doubt as to which you should use, Python is more user-friendly and might be the best entry route for absolute beginners.
- 7. **Practice with case studies.** Damian Mingle says that data scientists must apply their knowledge to real world datasets.
- 8. **Recognize your weaknesses.** Plan weekly reviews to take stock of how you can improve.
- 9. **Build your own applications.** It doesn't need to have widespread use: To facilitate his online shopping, Paul Brown developed a rudimentary script in Python so he could see the best discounts online!



10. Practice explaining complex problems to lay-people. Greg Poppe says that data scientists must be able to convey insights to end stakeholders, many of whom won't be knowledgeable about the field. (As an added bonus, Caroline McColl says that in Sydney there is a clear \$20-\$30k uplift for effective presenters who can build rapport with stakeholders.

# **Participate**

- 11. **Join peer-to-peer mentorship programs**, as recommended by Daniel Whitenack. These programs are great for circumventing the Catch-22 for many data science beginners of needing to 'know the right people'.
- 12. **Get mentors covertly.** Rather than contacting a prospect on LinkedIn with a request for mentoring, initiate a discussion by asking them for their thoughts on your work.
- 13. **Publish online.** This will give you something to show interviewers and prove your dedication.
- 14. **Up your game on social media.** Don't just express your opinion. Beau Walker advocates asking the community how they would solve a problem.
- 15. **Help with citizen science.** As Garth Zoller says, giving back to the community is always rewarding. Many citizen science projects are looking for volunteers.
- 16. **Tailor your invitations to connect.** No catch-all introductions. If you're struggling, the best way to get a response is to explain why you want to connect with *them* in particular.
- 17. **Enter (Kaggle) competitions.** Eu Jin Lok notes that competitions sharpen your data science skills and give you insider access to the projects that need them.

# When you're ready to apply

## **Socialize**

18. **Foster your network.** David Tanaskovic says you only need to start a network of people you know well and then build outwards. If you don't know where, online groups and <u>Data Science events</u> are a great place to start!

- 19. **Stay social.** As Caroline McColl says, companies often promote new technologies at big events—make sure you're there to see them.
- 20. **Keep informed.** Read the latest news stories on data science. They're more than talking points at the interview; they'll keep you ahead of the game.



#### **Promote**

- 21. **Curate your LinkedIn profile.** Andy Kriebel notes that recruiters are paying attention to LinkedIn—make sure to look after your digital footprint!
- 22. Write a stellar template CV and cover letter. Richard Downes prescribes highlighting why you should be considered and the benefit you'll bring to the organization.
- 23. **Embrace your experience and education.** Like Erika Dorland, consider how 'less relevant' subjects can be articulated as strengths in the interview.

#### **Filter**

24. **Focus on your interests**, and look for jobs that complement them. Don't go the well-trodden path because you think it's the safest way to a

- job. As Nadieh Bremer says, when you are passionate, you are much more likely to get ahead.
- 25. **Consider companies great and small.** Yes, there's Tesla and SolarCity, but there are also smaller companies who will offer you more responsibility.
- 26. **Analyse the competition.** Research the people your prospective company has hired and identify similarities between your skillsets.



## **Prepare**

- 27. **Prepare pertinent questions** like: "What is your definition of a data scientist?" and "How have other data scientists at the company invested in their personal training and development?"
- 28. **Bring examples of past work**... and be prepared to talk about them. Nicholas Cepeda's explanation of an exercise he carried out in his Tableau course may have been what got him the job.
- 29. **Bring value, even to the interview!** Sam Flegal recommends identifying the tools companies are using, and then researching the data that those tools provide. Your dedication will stand out.

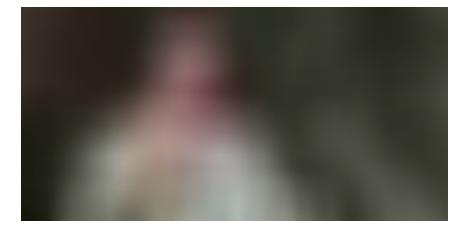
## When you're working as a data scientist

## (Re)discover

- 30. **Revise the basics**. Deepak Prasad says your basic knowledge of data science should always be strong.
- 31. Frame the problem *before* you begin a project. For Garth Zoller, the most important skill for a data scientist is to think about *how* to think about a problem. Consider the dependencies and context of a problem before tackling it.
- 32. **Understand why you're using selected tools.** David Venturi says that there is always something behind why we use specific tools for a task, so it is important to know each tool's purpose.
- 33. **Upskill yourself.** Josh Coulson likes people who have a "growth mind-set"—to consistently learn, seek feedback, and improve upon the status quo.

## **Adapt**

- 34. **Be flexible.** Harpreet Singh says the best data scientists are those who ask questions and form hypotheses from them rather than go headfirst into a project.
- 35. **Be proactive**. Damian Mingle wants data scientists to learn how to create data science solutions from business problems. Doing so keeps your role an active part of the company's future.
- 36. **Get a mentor**, ideally someone you can meet regularly. Don't be shy and don't be unnecessarily selective: Paul Brown says that some of his mentors have simply been managers who saw his potential.



- 37. **See the big picture** and ask if what you're doing is providing value. If you're not providing value or revenue to the company, consider a different approach. Richard Hopkins believes that understanding how to use the data in an operational context is often neglected.
- 38. **Don't forget visualization tools.** Understanding the *shape* of the data helps its analysis. Tableau made a huge impact in streamlining Megan Putney's work, as it allowed her to find the data she needed at a glance.
- 39. **Talk to the right people.** Ruben Kogel asked people who faced similar work challenges to connect. Similar themes started to emerge in their discussions, which enabled them to find the best solutions quickly.

#### **Produce**

- 40. **Become a storytelling pro.** Vitaly Dolgov's mentor advised him to take clients on a journey, first visualizing the problem and then offering a reasoned solution.
- 41. **Be selective.** Harpreet Singh says it is vital to have domain expertise in order to make a bigger impact. At this stage in your career, you'll have enough knowledge of the basics that you can afford to specialize.
- 42. **Create online courses (I).** YouTube is a great platform for people to test the water on a less formal scale than course sites like Udemy. Ulf Morys recommends watching Geoffrey Hinton's series of talks on the development of neural networks.

43. **Create online courses (II).** When you're more confident, visit Udemy and search for terms related to your topic. Check that there's demand for your topic. Lay out a roadmap for creating content and produce your course.



# **Support**

- 44. Facilitate introductions from which you don't directly benefit. Who knows how that good deed might serve you in the future?
- 45. **Become a consultant.** Jen Underwood says that the benefits of owning a company is that she can focus on projects that invigorate her.

These are our top tips from our SuperDataScience podcast, each and every one handpicked to get you one step closer to <u>(re)activating your career.</u>

. .

But if you wish to get more information, meet many of the experts we've mentioned and join hundreds of others data enthusiasts who with to take their Data Science Career to the next level, <u>click here</u> and Join us Live on November 10–12, 2017

NOV, 10-12, 2017 | SAN DIEGO, CA

