TRANSITION TO DATA SCIENCE

THE BLUEPRINT

The flexible and viable path for the mid-career professional

By Ermin Dedic

Skilled data professionals, including Data Scientists, Data Analysts, and Business Analysts, are among the most highly sought-after professionals in the world today. Companies in all industries find their skills invaluable.

But let's face it - if you are a mid-career professional - the idea of seriously disrupting a whole and busy life is not all that appealing, even though data is a passion. Maybe you are in IT, Accounting, Software Engineering, Journalism, Insurance, or a similar field. You are likely earning a decent salary. You might have a serious partner or children or be prioritizing these things if not there yet. The idea of going to a traditional brick-and-mortar institution to get another degree and compete with teenagers and young adults is not exactly sexy.

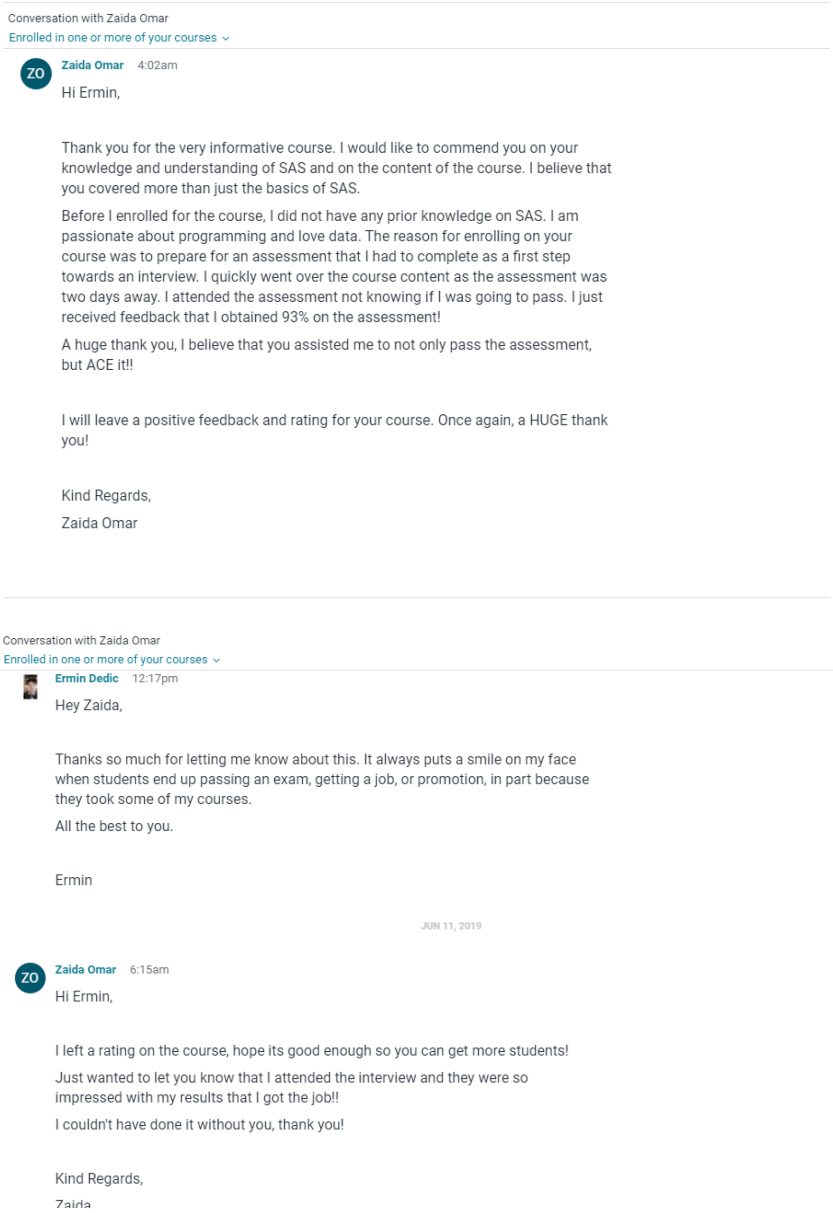
Here's the first piece of good news - you can learn data science in your spare time without disrupting your current quality of life and be ready to make a smooth transition in about a year.

While the industry is getting more competitive by the day, you don't need to spend years in university and thousands of dollars to get a foothold. **The only exception** - if you will only accept a data scientist position and have no interest in spending any amount of time in a less senior role.

New graduates (undergrads) fill many (most) entry-level data analyst and business analyst roles with no prior experience (no knowledge of the industry or coding skills). **And here's more good news - you can do better than entry-level. I don't want you fighting for spots with teenagers and young adults.**

How do I know that getting a job in data is not all that hard? First, from the mouths of students who message me to share the good news after taking a course of mine.

Here's a message I received from just one of my students. As you read it, consider that this is the NORM in the current economy, not the outlier.



Conversation with Zaida Omar

Enrolled in one or more of your courses

ZO **Zaida Omar** 4:02am

Hi Ermin,

Thank you for the very informative course. I would like to commend you on your knowledge and understanding of SAS and on the content of the course. I believe that you covered more than just the basics of SAS.

Before I enrolled for the course, I did not have any prior knowledge on SAS. I am passionate about programming and love data. The reason for enrolling on your course was to prepare for an assessment that I had to complete as a first step towards an interview. I quickly went over the course content as the assessment was two days away. I attended the assessment not knowing if I was going to pass. I just received feedback that I obtained 93% on the assessment!

A huge thank you, I believe that you assisted me to not only pass the assessment, but ACE it!!

I will leave a positive feedback and rating for your course. Once again, a HUGE thank you!

Kind Regards,

Zaida Omar

Conversation with Zaida Omar

Enrolled in one or more of your courses

Ermin Dedic 12:17pm

Hey Zaida,

Thanks so much for letting me know about this. It always puts a smile on my face when students end up passing an exam, getting a job, or promotion, in part because they took some of my courses.

All the best to you.

Ermin

JUN 11, 2019

ZO **Zaida Omar** 6:15am

Hi Ermin,

I left a rating on the course, hope its good enough so you can get more students!

Just wanted to let you know that I attended the interview and they were so impressed with my results that I got the job!!

I couldn't have done it without you, thank you!

Kind Regards,

Zaida

Zaida enrolled in my course on May 2nd, 2019. She took the employer's assessment and passed with a score of 93%--that was among the highest of her peers!

On June 11th, 2019, she told me that she had an interview and got the job. She got the job much faster than she could have ever dreamed possible, defeating

competitors with advanced college degrees and years of experience—and she wasn't the only one.

My name is Ermin Dedic. When I first began teaching Statistics and SAS Programming five years ago, I did not imagine transforming lives and getting featured in a world-class magazine like PCMag.

As an instructor, it took me six months to go from nothing to surpassing 2k/month USD in earnings—just by teaching. You might decide that your end goal is working for a company or government as a data scientist, data analyst, or business analyst - and those are all inspiring opportunities and more typical!

Not only are these opportunities possible, but it's much simpler than you would think. And now, I'm here to help you lay the groundwork for a fantastic transformation in your own life.

We're going to start from the end and work backward from there. So first:

1. How exactly do you make money in Data Science/Analytics?

You have plenty of options.

If you are a highly independent person (like I am), being self-employed might be preferable over working for a company. Here are a few different paths, with their pros and cons.

1.) Develop content and monetize it (i.e., video courses, a blog): If you decide to develop programming or data science content, you will have complete control over what you do. There will be no ceiling on your income, and your success or failure will entirely depend

on your ability or inability to build an audience by developing valuable content and then monetizing it.

2.) Start a company that develops and provides data science products or services: This option requires innovation, has a lot more risk, and generally requires a more significant initial investment. So leave it alone for now.

3.) Freelance or start an agency, then take on jobs from clients and help with their projects. While this option does not require you to develop or innovate much, you will have complete control over your work hours, how much you charge, and the projects you take. If you've ever had a bad boss, you'll appreciate the freedom of being able to pick and choose what you take on and be able to "fire" bad clients.

Your success comes down to doing good work and offering exceptional customer service to your clients. You can easily apply to platforms like Upwork or Fiverr to start building your portfolio.

If you choose the first path, you could start by teaching as I did. You can earn thousands of dollars per month by developing pre-recorded video courses and posting the content on popular educational platforms. I will warn you, though, that the strategies to excel are different than when I started. Developing a course is also a great way to learn, as preparing content makes the concepts stick.

But, there's a final option: traditional employment. Most of my students work for a company. About half of them are in the Finance/Banking or Healthcare/Pharmaceutical industries, turning programming into one tool in their data science toolkit.

Zaida was interested in data but did not know SAS Programming. Zaida was required to take an assessment before she was offered an interview by a company.

Companies often require candidates to take an assessment before offering an interview. If you do poorly, they throw out your application immediately.

She utilized my SAS Programming course to prepare. Despite not having a comprehensive background in the field, she aced the assessment—getting higher grades than others who had spent years in university. She was then called for an interview and got the job there and then.

2. Can you build a secure, stable future? (How do you become invaluable to any employer)

After all, we're not just trying to transition to a new career. We want long-term and secure employment. As the COVID epidemic showed, you must consider two main factors.

i.) How recession-proof or catastrophe-proof is your sector/industry?
ii.) How hard is it to replace your skillset? (How valuable are you?)

During the pandemic, we heard a lot about the 'essential' worker. Emergency responders (i.e., paramedics and firefighters) and critical retail services (i.e., grocery stores and pharmacies) are perfect examples.

Financial services such as insurance, stocks, and mutual funds are also vital services that remain largely unaffected during uncertain times.

Why? Because everyone needs insurance and expects their assets to be well managed even during pandemics and rough times.

Suppose you know how to develop and use algorithms to optimize the performance of a customer's assets. In that case, **you will always have work in finance (portfolio management) or insurance, no matter the circumstance.** Remember that individuals who can afford to invest in such portfolios will always afford a service that protects and builds their wealth, regardless of the occasion.

And because you're highly specialized, bringing together a mix of different disciplines (only one of which is programming), companies will seek you out, and you will be difficult to replace.

While it is, of course, conceivable that in the short-term, even insulated industries may face some job losses, as a rule, the harder it is to replace your skillset, the safer your career is from unexpected events.

As a relative newbie to the data science scene, **your job is to develop the technical (and soft skills) that will make you indispensable (and incredibly sought out) and, therefore, demand higher compensation.**

And now, we get to the most critical part:

3. Where are all the opportunities?

Beyond career fairs and some counselor guidance, universities never teach their students to survive in a competitive or quick-changing job market. Self-learning is the only option to stay relevant in most fields. This modern reality is why most large companies like Netflix and Volkswagen outsource upskilling of their employees to

providers like me, who spend all our time looking at the new tools, using them, and then teaching them to learners like you.

Furthermore, more than 80% of good jobs never make it out to the job market—four-fifths! These “insider-deals” are between friends and colleagues, so building a network is just as crucial as getting skilled in your work.

Rather than walking into companies with your paperwork in hand and begging for a job, you should get proactive and start building a network of other data science enthusiasts. This exposure alone makes the difference between getting your first job and keeping motivated.

Naturally, some people in the network will get their first job sooner. As a result, they may be able to give you insights about what worked for them or even connect you to better opportunities.

LinkedIn is a great place to start. It’s free, easy, and people are pretty open to connecting with you if you send a note along with a connection request and explain who you are and why you want to connect. (Beyond, of course, getting money and favors from them)

You can shortcut this by:

4. Registering for a Kaggle competition.

Now that you know the value of having a network, you need to build one by meeting like-minded people. You want to go where the opportunities are. An excellent place to start is Kaggle.

(https://www.kaggle.com/competitions).

Kaggle is not only a terrific way to grow your data science skills and win prizes, but it proves to employers that you can bring value.

Competitions offer different prizes (money prizes, merchandise/swag, kudos, and knowledge.) Almost everyone I know started with the Titanic competition (including myself!).

Let me tell you a secret. Lean in close. Big tech companies value how you perform in a Kaggle competition more than any certificate.

I know this because Apple, Amazon, and the like, regularly recruit individuals from my network. **One person in my network is Ivy-league educated, yet the tech companies focused on his Kaggle performance while recruiting him. They completely ignored the exclusive, quarter-million-dollar university degree!**

While other employers outside of tech may be less impressed by your performance on Kaggle, it's slowly gaining traction outside of tech as well. And in either case, are you going to seek out mediocre employers or the companies at the cutting edge?

To demonstrate your work…

5. Building a data-science portfolio

Writers often speak of the "show, don't tell." principle. Suppose you've attended an interview where you were inexperienced. You know the uncomfortable feeling of explaining how you are suitable for the job without having a way to demonstrate this. A portfolio of self-guided projects becomes super indispensable.

You want to complete a few projects that you could put up on Github (a place that hosts your code) or even your blog. As an example, you could complete a project focused on data cleaning. This step would show your ability to take messy, raw data, clean it, and perform simple analysis.

Consider this: What was MY portfolio? My online video courses. After I felt I was competent in SAS programming, I developed the courses to showcase my skills.

6. How to start learning data science (even if you do not know to program)

I have given you a general blueprint for transitioning to the data science space. Of course. You may be wondering: Hey! Why isn't there anything about actual programming?

There are thousands of resources out there. This ebook is not about technical skills but successfully transitioning into the data science space by showing you my students' steps to gain valuable employment.

I became a data science professional by acquiring skills, listening to feedback from my peers/network, and acting on that knowledge and feedback. I developed the skills partly from University and partly self-study (Video Courses, YouTube, Books). My portfolio (or my project for concretely demonstrating my ability) was my video courses.

This approach is the blueprint for you as well.

The starting point is to learn a programming language or two, learn statistics and linear algebra, learn a bit of machine learning, and consider acquiring soft skills by taking a course on problem-solving, communication, leadership, or emotional intelligence. This first step is the building **credibility stage**, where you **can do this**

via a short, intensive Bootcamp or Self-learning. Then comes the **exposure phase**, where you can create a portfolio of self-guided projects and start networking.

What's Next? Send Me Your Questions

If you are still reading, congratulations! You are passionate about transitioning into data science. I'm going to give you a chance to ask a question that might be on your mind. There are no stupid questions. I want to help you by saving you time from learning something that isn't right for you or going in a direction that might not be productive.

In a few days, you'll get back a video where I answer some common questions that have landed in my email over time (and, of course, the answer to your specific question).

So just click 'Reply' and send in your question.