

THE MASTER'S

SOP STARTER KIT



**A Step-By-Step Guide to Outlining
the SOP that Gets You Admitted**

By Jordan Dotson

The Ultimate SOP Starter Kit

Imagine how it will feel when you write a powerful, persuasive SOP for your graduate applications. One that you can recycle over and over again for multiple universities. Not only will you show admissions committees your TRUE potential, but you'll be able to hit "submit" with far less stress than you're probably experiencing right now.

Instead, you'll sit back with a happy sigh, proud in the knowledge that professors at your target schools will see you for the devoted scholar that you are.

Can you imagine it? That's a good feeling, isn't it?

With a smart, sophisticated SOP you'll get to escape the anxiety trap most applicants fall into, and have the freedom to get back to studying the stuff that really floats your boat. Because that's what it's all about, right? Studying, researching, growing your career, and using your brain to make a difference in the world.

Getting Started With Your Statement of Purpose

To help you kickstart your SOP journey, there are four important questions you need to answer. The good news? Once you have all the details (which I'm going to give you in this Starter Kit) these four questions will slot perfectly into a sentence-by-sentence outline for your statement of purpose.

Question #1:

What is my hyper-focused academic goal? (What problems do you want to solve, but need more education to do so?) 小时候住在钢铁厂旁边；想知道气候变化的更深层次内容，不局限于温室

气体和气温上升，未来百年人类的存亡？

Question #2:

Why am I interested in pursuing this goal? (What was your "intellectual journey"?)

Question #3:

获取更深度更广的大气知识，学习到建模、处理数据等技术。

How will this master's program help me reach my goal? (What is your "study plan")?

Question #4:

What convincing proof do I have that I'm 100% ready to pursue this goal as a graduate student?

1. 化学方面，自己的研究经历和优秀的课程成绩
2. 数据处理方面，有了先修课

QUESTION

01

What Is My Academic Goal?

One of the most powerful steps you can take right now to kickstart your SOP journey is to get clear on your academic goal—the central intellectual topic of your candidacy. This one step will put everything...and I mean everything...into motion.

At this point you might have a few ideas—or too many ideas—about what you'd like to study or research. Or maybe you feel stuck because you're honestly willing to study anything (as long as you get accepted).

No matter where you are right now, the following exercise will help you choose the perfect central topic for your SOP. It's the topic your target school genuinely hopes you'll write about, and the topic you should be excited to write about. You're going to study it for the next few years after all!

Before we jump into the exercise, there's one concept you need to understand that will help you narrow down your academic goal quickly. Your task is to focus your intellectual interests, so that everyone who reads your SOP will know exactly who you are and exactly what you want to accomplish.

Academic Fields Aren't Goals

When I ask you what you want to study, what would you say? Artificial Intelligence? Bioengineering?

That may be a good answer for me (because I'm a humble writer). But what if your ideal professor asked you this question? What would you say then?

Imagine a mechanical engineering professor looks at you and asks what you want to study, and you reply, "engineering." What would that professor think about you? He wouldn't consider you the sharpest tool in the shed, would he?

But what if you said, “I’d really love to study phase change material additives for tunable thermal fluids... maybe gallium-indium nanoparticles? Man, that would really help me in my career.”

Yes! The professor’s eyes would light up, right?

Unfortunately, the vast majority of master’s applicants never specify what they hope to study in their SOP. Many do this because they don’t really know. Instead, they list the names of courses that look interesting. Many make vague assertions like “I’m eager to take Foundations of Data Science” (because they’ve read that listing courses is the right thing to do). Such students haven’t taken the time to figure out an academic niche for themselves, and these students typically get rejected.

But you’re not going to make that mistake. This exercise will help you narrow your goal with laser-like focus.

Do This

污染物在空气中发生的转变，运用数据预测污染物的浓度分布，并且对气候变化产生的影响

1. State your academic field.

2. Choose two subfields within that field that seem most interesting (or most relevant to your hopeful career).

Air quality and Climate Modelling.

3. Choose two subfields within those subfields that seem super fun.

4. For each subfield, think of 1 application or currently trending problem that seems very cool to you. If you’re having trouble, type the subfields into Google Scholar and see what researchers are currently working on.

5. Of these 4 applications or problems, which 2 would you most love to work on in grad school, and then, in your career?

Example:

1. State your academic field.

Computer Science

2. Choose two subfields within that field that seem most interesting or relevant.

Artificial Intelligence and Computer Vision

3. Choose two subfields within those subfields that seem fun.

AI: Natural Language Processing, Speech Processing

Computer Vision: Object Recognition, Image Restoration

4. For each subfield, think of 1 application or currently trending problem that seems very cool to you.

NLP: Optical character recognition

Speech Processing: Emotion recognition using neural networks

Object Recognition: 3D photo-realistic simulators for robots

Image restoration: Visual perception for underwater robots!

5. Of these 4 applications or problems, which 2 would you most love to work on in grad school or in your career?

3D photo-realistic simulators for robots or visual perception for underwater robots

Okay, now what do you want to study?

"I'm really interested in 3D photo-realistic simulators and visual perception for underwater robots, but I'd also be excited to explore optical character recognition or speech processing. This is why I'm so excited about studying at Marvel University, where Dr. Stark is doing fascinating things using RCNN in the two-stage detection method for deep sea glide robots, and where Dr. Banner recently demystified bilingual OCR systems for English and Ladakhi script using a new approach of segmentation and splitting the characters."

Doesn't that sound like a focused student to you?

Now you know what we mean by an "academic goal." It's the **purpose** in your Statement of Purpose -- the deep, nitty gritty of your field that really interests you. It's the topic that lights you up. It's the "dream scenario" for your graduate studies, and (bonus points) it should give you insight as you start comparing different graduate programs and determining which are most suitable for you.

How to Put This Into Action

Congratulations! Now we're making progress. In a Word/Google doc or notebook, I want you to work through the exercise. Think about what you really need to know to progress further in your career, and maybe take some time to do a little research on Google Scholar. 30 minutes will go a long way here. When you complete Step 5, write out your own academic goal in a single declarative "Sentence of Purpose." Then, save it. This is going to be your guiding light as you build your outline.



QUESTION

02

Why am I interested in pursuing this goal?

Once you've determined your academic goal, something starts to shift. Your whole grad school journey becomes more real, and things begin moving forward quickly. It's magical.

Now, it's time to find the intro paragraph to your SOP: your frame narrative. Think of this as "the story of how I came to develop my academic goal." It may come to you in ten minutes, or it may take an afternoon of musing; but don't let yourself get stuck here. Your task is to think of an experience from your life that illustrates why this academic goal is real and relevant for you. It will show admissions committees that you're a unique human being who's eager to create an impact with your scholarly pursuits. More importantly - it will make you memorable.

The Two Types of Frame Narratives

Ah Ha Moments

For many successful applicants, the frame narrative of the SOP will illustrate a moment where they said one of two things:

- *"Crap, there's so much more I need to learn before I can achieve my goal."*

These applicants are usually professionally oriented. Often, they've had a great internship and a few years of professional experience. Now they want to "level up" in their career, but they realize they need to learn a lot more about Data Analytics, Mental Health Counseling, or Brain-Computer Interfaces first.

- "Wow, this is the most fascinating thing ever, and I can't wait to learn all about it."

These applicants are often still seniors in undergrad who've had awesome "lightbulb" moments. Often, they've participated in research and discovered some new question that fascinates them, but which isn't directly related to their previous experience. This is like a lightning in a bottle. These are the moments where truly impactful scholars are born.

Intellectual Journeys

Other successful applicants tell stories that occur over wide swaths of time. But make no mistake, these aren't meandering, unfocused biographies. They're not dull lists of the classes you took in undergrad. These are **intellectual** journeys.

These frame narratives might describe how your freshman Pre-Med major led you to discover protein editing and caused you to change your major (lightbulb!). Then, how through protein editing, you discovered your new academic goal in AI-driven in-silico design (double lightbulb!).

These stories will summarize an inspirational period of time, **a series of moments of inspiration** which were absolutely essential to the formation of your current academic goal. I repeat: **absolutely essential**. These are NOT chronological lists of every research project you've ever worked on. They only summarize the shimmering moments when something changed in your life.

Brief Examples:

1. "While working as a financial analyst, where I optimized \$35 million of annual cloud-computing spend, I realized I could never truly shape corporate strategy in the automotive industry without a more nuanced education in dimensionality reduction and classification machine-learning models."
2. "Though I began my career as a Pre-Med, after assisting Dr. Xavier's studies on central nervous system diseases, I discovered a greater purpose in research that develops treatments or models their pathology to validate new drug candidates."

Avoid Childhood Stories Like the Plague!

Childhood stories. They're the bane of every admissions reader's existence. Let's make this a hard and fast rule. I want you to repeat this out loud:

"I will not write an introduction that tells how I've always been interested in technology, computers, books, history, or science."

Unfortunately, many applicants persist in writing these unfocused, irrelevant frame narratives. You will not. Instead, you're only going to write the **recent** story of how you came to discover your *current* academic goal. (Think: within the last two years.)

How to Put This Into Action

Go back to your notebook and take 10 minutes to jot down some brainstorm ideas about your frame narrative. For most people, this comes quickly. But if it doesn't, don't worry! Keep at it. Don't think of it as trying to conjure a fancy story out of thin air. That's not it at all. Think of it as a short explanation of how you became who you are today.

Once you've got a solid idea, run it through the following checklist to make sure it has all of the elements necessary to tell a provocative intellectual story.

- Does this story revolve around an "Ah ha!" moment, or period of time, where I realized I want or need to learn more?
- Does this story involve me asking questions and moving toward my academic goal?
- Does this story show me striving, struggling, or wanting to be better?
- Is this story mature, professional, and intellectual (and not childish or naïve)?
- Is this story directly and inextricably related to my "academic goal?"

If you answer "yes" to all the above questions, then, my friend, you're on your way to a rock star SOP.

QUESTION

03

How will this master's program help me reach my goal?

One thing that's just as important as dreaming up your big academic goal is to look at your target universities and ask: How am I actually going to achieve that goal?

- Which classes am I going to take?
- Which professors am I going to work with?
- Which specialization or concentration will I choose?
- Which internships or co-ops will be useful?
- Are there any obstacles at this university? Anything that's not ideal?
- Can I study my academic goal in a thesis or capstone project?

It's massively important for a good SOP to answer these questions. Why? Because *good applicants know these answers*. In fact, this is often the biggest difference between a "great" and an "average" applicant. Plunk either of them into an M.S. program and they'll both work hard and move on to great careers. But when they submit their SOPs, it's the focused, detailed, and thorough applicant who shines a little brighter.

Be shiny, friend. Plan out your next few semesters of coursework and clarify your purpose even further.

Research-Focused Applicants

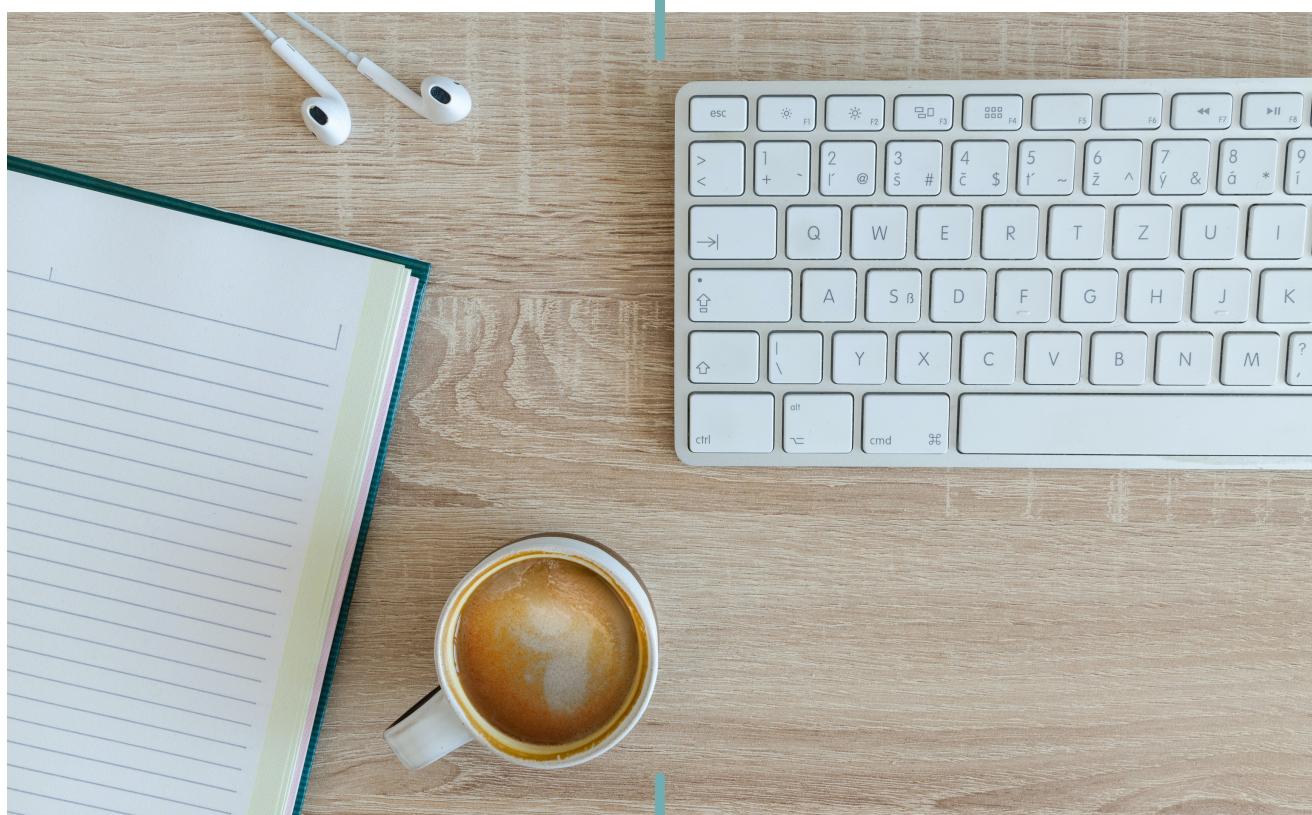
If you're a scientist who might apply to PhDs in the future , then your "study" plan will be quite different from a professional-track student's. Like PhD applicants, you need to describe 2-3 potential PIs at your target university - the professors whose research excites you most.

You probably know this already. But you've still got some important considerations. Don't make the mistake of just listing professors and their research specialties. This isn't enough. Spend enough time on Reddit and you'll find multiple AMAs from admissions coordinators **begging** students to write more about their research questions.

As you outline your own potential PIs, make sure you answer these questions for at least 2 professors.

- Which 1-2 aspects of the professor's research do you find most fascinating? **Why?**
- Which novel techniques or research questions did the professor pursue that align with your academic goal? **How?**

This is NOT about listing the names of papers that the professor published. It's about showing your **genuine interest** in their work. If you don't actually have a real interest, if you're grasping for straws and just hoping you'll get lucky, then you probably need to think about why you're applying to this school in the first place. But if you take the time to think through these questions patiently, you'll reap big rewards.



How to Put This Into Action

It's research time, friend. Sit down at your computer for 30-60 minutes and jot down answers to these questions. You will be AMAZED by how much clarity comes from diving into each of them.

For each one, think about your "Why." If you've written down the name of a professor you want to work with, ask yourself why. Why is this professor so interesting to you? Write it out. Don't skimp on details. When you choose the classes you want to take, ask yourself why. How will the class prepare you to succeed in your future career? Write it out in a sentence. If your target program offers a selection of specializations, choose the one you want, and write down why. This is important. Writing out your reasons makes them real.

In fact, I believe this is **the single most important part** of the SOP. By writing out a "study plan" for your target university, you'll prepare yourself to explain to the admissions committee exactly why they're the perfect "fit" for you (and why you're the perfect fit for them).

QUESTION

04

What convincing proof do I have that I'm 100% ready to pursue this goal as a master's student?

The final piece in your SOP puzzle is proving to the admissions committee that you're a smart cookie. Luckily, that'll be easy, right? You know how hard you've worked. You know you're capable of succeeding in grad school. Now, we just have to make sure your reader knows too.

When answering this question, think of it as a highlight reel. It's NOT an expansive and detailed list of everything you've ever accomplished. That's what the resume/CV is for! Instead, this is your *Greatest Hits* album. It's a description of your most unique accomplishments - the accolades that prove you're **better in comparison to other applicants**.

What Should I Include?

Feel free to pick and choose from any of the items on the page below. Discard the ones that aren't relevant for you and focus on the ones that really make you shine. Sometimes a good SOP will only have 2 of these "highlights." But if they're unique and impressive, they'll work.

GRADE POINT AVERAGE

What was your undergrad GPA? Your major GPA? Were they impressive? Good, let's mention those. They show that you worked harder than your peers.

AWARDS AND HONORS

Did you receive any official awards which prove how disciplined a student you are? Phi Beta Kappa? The Stark University Leadership Award in Genomics?

GRAD-LEVEL COURSEWORK

Did you take any relevant graduate classes? Did you make As? Awesome. DEFINITELY mention that.

RESEARCH EXPERIENCES

Did you do any research or independent studies relevant to your academic goal? Beautiful - you'll want a 1-2 sentence description.

INTERNSHIPS / CAREER EXPERIENCES

Have you had any relevant internships or job responsibilities which were related to your goal? How were they different than the experiences other applicants have? How have they prepared you for this next step?

TECHNICAL / LABORATORY SKILLS

Are you a full-stack developer? A wizard with Python, Ruby, and Shell? Are you experienced with cell and tissue cultures? Electrophoresis? Or, perhaps you speak a foreign language that will help you in your research?

How to Put This Into Action

In your doc or notebook, I want you to write one sentence at the top of the page. It will look like this:

"The following list proves that [insert your name here] is 100% ready to succeed in [insert your academic goal]."

Example:

"The following list proves that Jordan is 100% ready to succeed in researching 3D photo-realistic simulators and visual perception for underwater robots."

Next, take 10-20 minutes to write out your bullet points of evidence. Make sure that each point really is convincing. If your GPA is kind of average, don't mention it. If your volunteer work has nothing to do with your academic goal, forget it!



THE OUTLINE

Now that you've answered the 4 important questions, it's time to arrange them into a suitable outline. This template is designed to help you do just that.

Section 1: Introductory Frame Narrative (1-2 paragraphs)

1. My intellectual journey. This is the story of how I came to develop my academic and career goal. It will describe either an "ah ha" moment or a period of time that changed the direction of my life and convinced me that I need to pursue a master's degree. (*Question #2*)

2. My academic goal ("Sentence of Purpose"). I'll end this section by stating exactly what I hope to accomplish in graduate school. (*Question #1*)

Section 2: Why This Program (1-2 paragraphs)

3. My study plan. This is my proof that the university is the perfect place for me to achieve my academic goal. It explains the courses and concentrations in which I hope to enroll. It explains which professors I want to work with, and why. It might even explain how this program is different from similar programs at other universities, and thus, presents a unique opportunity for me. (*Question #3*)

Section 3: Why I'm (Overly) Qualified (1-2 paragraphs)

4. My greatest hits list. In this section, I'll provide convincing proof that I'm 100% ready to pursue my goal as a graduate student. I might mention my excellent undergrad grades, my research skills, awards I've won, or unique professional experiences. If something seems like it's not compelling proof ("is working as a campus tour guide relevant to business analytics?") then I won't write about it. (*Question #4*)

Section 4: Closing Frame Narrative (1 paragraph)

5. The end of my academic journey. In one sentence, I'll briefly refer back to the story I told in the introduction. I'll reaffirm, very specifically, my academic goal. If the SOP prompt asks me for my specific career goals, I'll mention those here. Either way, this is the logical conclusion of my journey. I'll end by promising the university that I'm thankful for the opportunity, and 100% ready to work hard and achieve my goal.

Congratulations!

Now you're on your way, my friend. Once you've answered all 4 questions, and organized them into a logical, flowing outline, it's time to start writing. Luckily, at this point, the writing will be easy!

When you know where your SOP starts, how it progress, and where it ends, the task of connecting the dots is simple. You won't have to scratch your head wondering what to write next. You won't have to stare raccoon-eyed at your laptop, wondering what the university expects you to say. You've got your roadmap right there in front of you. All you've got to do is follow it.

The Power of a Well-Organized Outline

The best thing about having a solid outline, and an organized SOP, is that it will save you TONS of time as you submit to multiple universities. Your answers to Questions #1, 2, and 4 won't ever change. Sections 1, 3, and 4 of your outline will stay almost entirely the same.

Thus, when recycling your SOP for different schools, you'll only have to outline new answers for Question #3: "What's your study plan?" This gets easier the more you do it.

If you've got six schools that require an 800-word SOP, you only need to write 1 or 2 new paragraphs for each. Even if you're applying to one of those finicky programs that don't ask for an SOP, but require you write 3-4 short responses, you're in luck. Typically, those short responses feature prompts like this:

Describe your short-term and long-term goals. How will our degree program help you achieve these goals? (200 words)

Please discuss past achievements that will help you succeed in this program. (200 words)

Perfect! These prompts just ask you to describe your "academic goal" and your "greatest hits" list. All you need to do is copy-paste and tweak the sentences to make sure they're smooth. In fact, I've NEVER seen a short-response application where this wasn't possible.

Your Journey Starts Here



The fact is, if you want a logical (but very persuasive) SOP that saves you time, anxiety, and headaches without sacrificing admissions potential — this starter kit is all you need.

In fact, this SOP template is the single most powerful way I've found to persuade admissions committees that your past experiences have prepared you to be a truly successful grad student in the future.

It's worked for hundreds and hundreds of applicants, in virtually every academic field, at every "brand name" university you can think of.

Even as you prepare for interviews, your SOP will serve as the backbone of your candidacy that allows you to speak honestly and confidently about who you are, and what you're capable of achieving.

In short, it's an amazing time to be a master's applicant.

Stick with me and I'll show you what it takes to move from feeling overwhelmed and frustrated with your applications, to becoming a grad student happily focused on the academic projects that truly light you up!

A handwritten signature in cursive script that reads "Jordan".