ICS 139W
Critical Writing
Writing process

Let’s have a discussion about the resume / cover-letter draft.

• How many wrote resume/cover-letter from scratch?
• Did anyone find this particular frustrating? How many struggled to find relevant work? Or was it “easy”?
• Write in one sitting, or multiple attempts?
• Where did people work (library/home/other)?
• How many revisions did people perform? Or are they submitting an initial draft?
Let’s talk about the *process* of writing

Surprisingly hard to find “best-practices” for such answer

Best resource I’ve seen

Robert Boice, Psychology Professor
Writing process

Provides empirical evidence for the benefit of different writing practices using observational studies

Suggests concrete writing exercises to hone skills for various practices (some take years to master)
Misconceptions about writing

• "I don't know any writer that thinks writing is fun." Author Stanley Karrow. (Writing is not fun).

• Writing best done in large blocks of interrupted time

• "The first thing a writer should be is -- excited. He should be a thing of fevers and enthusiasm." Author Ray Bradbury. (Inspiration for writing must be spontaneous and brilliant).

• Excellent writers are spontaneous and do not require outlining, pre-planning
Brief daily sessions (BDS) versus binge writing

Chapter 11, Boice

• Find a place that encourages writing. Ideally, set aside a room / location where nothing but writing is done. Face a window, pleasant artwork. Good to pause and focus on things at a distance, reduces eye strain and fatigue.
• Shoot for BDS of an hour a day, but even 15 minutes is okay. You can still accomplish a lot.
• In the short run (few weeks), give yourself a reward/contract (coffee at the end). Stop to avoid unpleasant associations.
• Start without inspiration. BDS’s keep projects fresh in your mind. Reduces fatigue associated with binge sessions. Establish a discipline that breaks up large task into small manageable bits.
• Charting progress. Keep a record of how many pages you write per day. Incredibly easy, effective, but often ignored.
Evidence for BDS

32 faculty tracked over 6 years
16 Binge Writers + 16 BDS

Binge writing:
Produced fewer papers, reported stress associated with writing, all failed to get tenure

BDS: all get tenure
Personal claims

⭐⭐⭐⭐⭐ Best advice on writing practices I have read. October 27, 2002

By Norman Ramsey
Format: Paperback | Amazon Verified Purchase

Some reviewers have criticized this book for being obvious. I found it anything but. The culture of my field says that the way to write a paper is to set aside large, uninterrupted blocks of time. It was an eye-opening experience to see hard data that show it is more effective to write in brief daily sessions. These writers are roughly twice as productive by several measures (pages written, manuscripts published) and also report themselves to be happier. This idea changed my professional life.

Norman Ramsey, CS professor and technical writing instructor
Let’s keep the next assignment in mind

For this assignment, you will prepare a personal statement, similar to one you may be required to write for application to graduate school (e.g., an MBA) or fellowship. Find a particular graduate school or fellowship to which you can apply. Select one of the following questions to answer with an essay of at most 800 words:

- What is your proudest achievement, and how has it impacted you?
- What are your short-term and long-term career goals, and how will a degree from our university (or fellowship) specifically help you achieve these goals?
- Describe a challenging experience, such as a personal or professional setback.
- Describe a person you admire.
- Describe a situation where your professional ethics were challenged.
- How will other students at our university benefit from your background, experience, leadership, and/or teamwork skills?
- What do you consider to be the single most important societal problem? Why?
- Why are you a good candidate to receive this award?
- Choose a book or books that have affected you deeply and explain why.
Writing as a process

http://en.wikipedia.org/wiki/Writing_process
http://owl.english.purdue.edu/owl/resource/682/01/

1) Prewrite
2) Outline
3) Draft
4) Revise
5) Edit

“Writing is a way to end up thinking something you couldn’t’ have started out thinking”

Peter Elbow
Pre-writing sessions

Boice, Chapter 9

• Start with 10 minute sessions
• Spend 1-2 minutes thinking about nothing. Strive for a "meditative" mindfulness by relaxing, focusing on your breathing, and sitting in a comfortable but alert posture. Mindfulness is not about finding lots of time for writing as it is about working more patiently, calmly, and wisely.
• Spend next 8 minutes looking at the prompt and coming up with a mental map of possible ideas. Importantly, write nothing.
• Talk aloud about some of what you have been thinking.
• After 10 minutes, take notes or draw diagrams about what you could write if you used the material. Importantly, write whatever comes to mind without judgement. No editing or apologizing. Tolerate imperfection.
Organize ideas into outlines

Boice, Chapter 10

Sociologist C Wright Mills suggestions for mindful outlining:

• Re-arrange items to look for general themes, then inter-connections
• Maintain an attitude of playfulness by casting ideas into categories and types to make sense of them.
• Consider extremes or opposites of important ideas
• Arrange materials for public presentation, as way of bringing closure to prewriting
Observational evidence

Boice, Chapter 10

20 dissertation writers. 10 practiced techniques of 10-minute mindfulness + patient thinking. Others tended to write immediately after sitting.

Inpatient writers:
• Comments such as “I've got to get moving here and get the thing finished as soon as possible; I'm very busy and I usually don't have time to write.”
• Writing sessions included long periods of blocking (staring at screen/paper for 10 minutes, or hours of work produced a single sentence of output)

Patient writers:
• 3X more likely to report creative ideas.
• 3X more likely to enjoy writing.
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Peter Elbow
First drafting

Norman Ramsey

*Write a Shitty First Draft™*
“Value a first draft not because it’s great but because it’s there.”
Drafting paragraphs

Research Statement
Deva Ramanan

I study computer vision, with the long-term goal of enabling computers with the ability to "see" as people do. I find such an endeavor compelling because it unifies both engineering and science — it offers both hard systems that encompass the innate structure of visual data collected by today's cameras, and the computational underpinnings of human perception.

Research agenda: My research is unique in its focus on the motivating task of understanding people from visual data. Many applications — be it a surveillance system used to flag suspicious behavior, or a photo-search tool that allows users to find pictures of their friends, or a gesture-based interface to control a television — all involve intelligent systems that understand people through images and video. Recurring themes in my work include a focus on video analysis, a desire for new algorithms and models that scale to the development of richer vision systems and are also a key component of human perception. Machine learning allows one to tune parameters to reflect the subtle statistical regularities of the visual world while computer graphics allows one to leverage visual "analysis by synthesis" techniques. My ongoing research agenda can be divided into three categories: representations, algorithms for inference and learning, and data development.

Invariant, structured object models: Object detection is arguably the central problem in computer vision. My postdoctoral work developed structural discriminative models that captured geometric deformations of objects. The resulting system publicly available won the widely-acknowledged PASCAL Visual Object Challenge in 2006 and 2008, and is quickly becoming the de facto standard for comparison in the field. Its impressive performance is due to a novel formulation of latent support vector machines (LSVM) and the development of other authors of invariant-oriented edge descriptors. LSVM provides an elegant framework to examine variations in the appearance of objects due to other "nuisance" factors such as viewpoint, object reflectance, and illumination. I will explore such invariant discriminative models in the future. In recent work, I have introduced image processing models such as separability and steerability to regularize these descriptors, demonstrating an increase in both discriminative power and run-time efficiency. Finally, a long-standing goal in computer vision is design of generative models that synthesize realistic image statistics. I am excited by ongoing work exploring Markov random field (MRF) models of image gradients, as I have found such models are competitive with highly-tuned SVMs but require far less training data.

Non-markovian tracking: My thesis introduced the first practical system for large-scale articulated tracking, based on the simple but novel idea of learning what an object looks like while simultaneously estimating where it is over time. This notion links the traditionally disparate fields of visual tracking and object detection — in short, a better object detector should make tracking easier. The corresponding probabilistic model involves several Markovian assumptions: both past and present observations are required to learn object reflectance. My system automatically learns the reflectance properties of a person's clothes, making it much easier to track and detect them. It has been run on hours of unscripted video, networked lectures, and public video streams for thousands of people — several orders of magnitude longer than any other approach in the literature to date.

https://owl.english.purdue.edu/owl/resource/606/01/
Paragraph unity

A paragraph should not start with one topic and end with another

All sentences should support a single topic. It's often useful to explicitly write a topic sentence somewhere in paragraph.

My (overboard) strategy: I place the topic in bold

Non-markovian tracking: My thesis introduced the first practical system for large-scale articulated tracking, based on the simple but novel ideal of learning what an object looks like while simultaneously estimating where it is over time [8]. This notion links the traditionally disparate fields of visual tracking and object detection — in short, a better object detector should make tracking easier. The corresponding probabilistic model violates classic Markovian assumptions since both past and present observations are required to learn object reflectance. My system automatically learns the reflectance properties of a person’s clothes, making it much easier to track and detect them. It has been run on hours of unscripted video, feature-length films, and yields accurate results for hundreds of thousands of frames — several orders of magnitude longer than any other approach in the literature to date.
Some astonishing questions about the nature of the universe have been raised by scientists exploring the nature of black holes in space. (2a/b) So much matter compressed into so little volume changes the fabric of space around it in profoundly puzzling ways.

(a) A black hole is created by the collapse of a dead star into a point perhaps no larger than a marble.

(b) The collapse of a dead star into a point perhaps no larger than a marble creates a black hole.

Which fits better? Why?
Paragraph coherence

http://owl.english.purdue.edu/owl/resource/574/02/

Coherence means it is easy for a reader to follow

Information flows from old to new
Use transition words and passive voice

We’ll talk more about this on Thursday
A look back at the writing process

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