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1 Overview

In this document, I plan to give some insight into my college journey as well as some advice for making the most out of your college career. The material is intentionally terse since rigorous advice for college is typically handled on a case-by-case basis.

Note: A lot of the material will be biased towards Computer Science and Mathematics (where applicable).

1.1 Introduction

I am a transfer student (from IVC and Saddleback College) attending UCLA, majoring in Computer Science, and graduating in the Spring of 2024.

2 College Overview

This section covers two major aspects of colleges: ranking and major choice. It aims to offer an alternate perspective on these two topics.

2.1 Ranking (Name Brand)

A college's ranking **does not matter**. Unless you want to attend a school for the brand name (which is fair), do more research into the field(s) you are interested in!

Example

The University of Illinois Urbana-Champaign (UIUC) is ranked 35th overall but 5th (above Cornell and Princeton!) in Computer Science.

While a college's rank gives a general heuristic for the quality their education, it should not dictate where you go.

2.2 Major Choice

If you do not know what you want to study in college yet, that is **okay**! I **do not** recommend applying for an “easy to get in” major with a plan to switch once you are (hopefully) there. Some departments do not allow for students within the school to change into a subset of majors.

Example

It is (allegedly) extremely difficult to transfer into EECS at UC Berkeley from another major.

3 Choosing a College

Choosing a college to apply for (or attend) is an important and difficult decision. Here are a few things you may want to consider before deciding where to apply (or attend).

3.1 Criteria

The criteria for choosing a college differs from person to person. Some questions to get you started are

- What major do you want to study?
- What do you want to get out of college?
- Are you planning on going to graduate school?
- Who would you like to study under?

We take a more in-depth look into these questions here.

What major do you want to study? This may be simple to answer, but remember to consider *all* of your options.

Example

Suppose you want to do research in Mathematics. The question then becomes “What branch of Mathematics?”. You may want to pursue a Pure Mathematics degree if the answer is theory. If you want to research topics in industry, then you may want to major in Applied Mathematics. If you want to study the foundations of Mathematics, then maybe a Philosophy degree is more appropriate.

What do you want out of college? This question is pretty straightforward. “I want to go to college to make money” is a respectable answer.

Are you planning on going to graduate school? Depending on your major and career goals, graduate school may be an option or required. If you want to go to graduate school, be sure you know *why* you want to go. “I’ve been in school for (about) 12 years, what’s another 2-6?” is a perfectly valid answer!

Example

A graduate degree in Computer Science is usually not required for an entry level job. However, a graduate program in Computer Science typically dives more into the theory of computation as well as provides a structured environment to learn or specialize in particular branches of the discipline.

Who would you like to study under? This is the most important question. Remember, an education is only as good as the educator!

Example

For Computer Science, I wanted to study under Professor Paul Eggert because he has made significant contributions to the Linux kernel, particularly in GNU `coreutils`, helped develop Emacs (a text editor similar to Vim), and currently maintains the timezone database (tz) backed by ICANN. I learned so much from his (lower division) Software Construction. He is extremely knowledgeable about the Unix system and systems computing in general (which is one of my many interests).

Example

For Computer Science, I wanted to study under Professor Alexander Sherstov because of his unparalleled passion for teaching. His Theory of Computation course (traditionally one of the most challenging courses in the Computer Science curriculum) was made intuitive only because we were being taught by someone who truly loved what he did. His teaching philosophy has no doubt transformed generations of students.

“Learning is a process; thank you for letting me be a part of yours. As you all graduate and move on with your careers, I know the future of computing is in good hands. All the best with the next step in your careers!”

– Professor Alexander Sherstov

The mission statement he gave in his last lecture was also very compelling, and gave insight into his character.

“When I took this course as an undergraduate, I sat where you sit now. The first time I learned about undecidability, I was in shambles. Surely, there must exist a computational algorithm for a given problem! It was a long walk back to the apartment that day, and food didn’t taste the same for a couple of days... *But*, I had an idea. Even if most of the interesting problems are undecidable, some are not. So, I need not solve the general case; only the cases that matter. That is what I have dedicated my life’s work towards. As I conclude the final lecture of the quarter, I hope you see the beauty of computation as I do, and I hope you learned something about the theory of computation.”

– Professor Alexander Sherstov

Example

For Mathematics, I wanted to study under Professor Alexander Merkurjev because he has made significant contributions to the field of Algebra. The Group Theory course I took under him piqued my interest in higher abstractions of Mathematics.

4 General Advice for Education

As mentioned in the **Overview**, I cannot give you in-depth advice, even for a Computer Science major. What I *can* do is give some general advice about approaching education.

4.1 Grades

Classes may not always seem useful or be the most engaging, but that's okay! To make the most of it, try to truly *learn* the material, even if they may not seem particularly relevant at the moment. While grades are important, it isn't as important as actually knowing the material. Quoting my professor,

“If I did not have to give out grades, I would not. Only *you* know how well you have done in this course. Your grade is merely a reflection of three 2 hour *slivers* of time during the exams. I nor the teaching assistants will be able to tell you how much you know about the theory of computation. Your grade is just a letter; receiving an A and knowing nothing pales in comparison to receiving a C but taking the time to truly learn the course material. Be proud; this course is the most difficult course in the Computer Science curriculum here at UCLA. No matter how much you *think* you have learned, the reality of it is that you have learned so much more.”

– Professor Alexander Sherstov

4.2 Professors

Talk to your professors! It sounds trivial but you would be surprised how empty some office hours can be. Professors are experts in their field, and are a great resource and mentors. Who knows, maybe they will offer you opportunities!

Example

I got to know my Programming Languages professor very well, and we now climb together! I even presented an advanced topic in data structures as a guest lecturer for his introductory Data Structures class.

4.3 Courses

Take classes that are interesting to *you*. Explore outside of your major and see what piques your interest (even if it doesn't *directly* help with your major)!

Example

I took proof-based math courses because math has always been interesting to me, and it has helped me tremendously in more ways than one. The learning curve was pretty steep, especially because we had to prove a lot of things that seemed obvious (e.g. “ $a = -(-a)$ ” seems so obvious that it doesn't require a proof, but it does).

4.4 Course Load

Take a manageable course load! “Manageable” means something different to everybody, so use your best judgement.

Example

Throughout community college and the first year and a half at UCLA, I was working an average of 50 hours a week and taking four or more major-related classes a semester/quarter. It was not the best for my sleep schedule and I wasn't able to focus as well in class. I don't recommend it! Once I decreased my course load to three classes, I was able to better understand the material and get to know my professors better.

5 Statistics

For those interested, these were my high school and community college statistics.

5.1 High School

Grade Point Averages

Type	Weighted	Non-weighted
Academic 9-12	4.1538	3.7179
Academic 10-12	4.3793	3.7931

Freshman Year

Course	Grade	Course	Grade
English 1A	A–	English 1B	A
Latin 1A	A–	Latin 1B	B+
Math IIA	A	Math IIA	A
Biology A	B	Biology B	B+
Cultl Gbl Age A	B	Cultl Gbl Age B	B+

Sophomore Year

Course	Grade	Course	Grade
English 2A	A	English 2B	A
Latin 2A	A	Latin 2B	A–
Math IIIA	A+	Math IIIB	A+
Chemistry A	A	Chemistry B	A
World History A	A	World History B	A

Junior Year

Course	Grade	Course	Grade
H American Lit A	A–	H American Lit B	A
H Latin 3A	A–	H Latin 3B	A–
H Precalculus A	A–	H Precalculus B	A
AP Statistics A	A	AP Statistics B	A
AP Physics 1A	C	AP Physics 1B	A–
AP US History A	B	AP US History B	A–

Senior Year

Course	Grade	Course	Grade
AP Eng Lit A	B	AP Eng Lit B	CR
AP Latin A	A–	AP Latin B	CR
AP Calc BC A	B–	AP Calc BC B	CR
AP Com Sci A	B+	AP Com Sci B	CR
AP Macro Econ	A–	AP Macro Econ	CR
Beg Ceramics A	A+	Beg Ceramics A	CR

5.2 College

Grade Point Average

Type	GPA
Cumulative	4.00
Department	4.00

First Year

Course	Grade	Course	Grade
C Programming	A	H Communications	A
H Psychology 1	A	Java Programming	A
College Writing 2	A	Physics I (Kinematics)	A
Analytical Geometry/Calculus III	A	Intro. to Linear Algebra	A
		Intro. to Computer Systems	A

Summer Session

Course	Grade
Intro. to Computer Science I	A
H Principles of Microeconomics	A
Physics II (Electricity & Magnetism)	A

Second Year

Course	Grade	Course	Grade
Assembly Language I	A	Assembly Language II	A
H Film & US Culture	A	Discrete Mathematics II	A
Discrete Mathematics I	A	H Academic, Career, Life	A
Intro. to Computer Science II	A	Intro. to Computer Science III	A
Elementary Differential Equations	A	Data Structures and Algorithms	A

things i would like to talk about

→ CSU or UC?

→ School name

→ Major choice

→ Outside of CA