



A2 ACHIEVE STUDENT GAP ANALYSIS
BEAU BLACK
Class of 2027 | Hartselle High School

WHERE YOU STAND RIGHT NOW

Beau, the first thing I notice when I look at your record is that we are not trying to fix a weak college application. We are trying to make sure a very strong application does not become a generic one.

Academically, you have already done much of what selective engineering schools want you to do. You have a 4.0 unweighted GPA, a weighted GPA reported around 4.41, an ACT of 33, a very high class rank, extensive AP coursework, and four years in an Engineering Academy. Your resume lists AP Calculus AB, AP Physics, AP Literature, AP Government, AP Macroeconomics, AP Language, AP Research, AP Seminar, AP Computer Science A, AP Computer Science Principles and AP World History.

That means your primary gap is **not academic qualification**. Your biggest challenge is application strategy and presentation. You are applying to schools where there will be thousands of students with excellent GPAs, advanced math and science courses and strong ACT scores. At Auburn, your numbers are already above much of the enrolled-student profile. At Georgia Tech, Purdue Engineering and UT Austin Engineering, academic strength is essentially the price of admission. It does not automatically distinguish you.

What will distinguish you is everything else. And you actually have a lot of “everything else.”

YOUR STRONGEST ASSETS

1. Your Academic Record Is Very Strong

Your 4.0 unweighted GPA matters. Your rank matters. Your rigor matters. Your engineering preparation matters. And the combination matters more than any single statistic.

You are not simply earning high grades in an easy schedule. You have deliberately pursued advanced coursework across STEM and humanities while completing a four-year engineering pathway. For engineering admissions, that is exactly the kind of academic foundation we want.

Your AP Research and AP Seminar experience also separates you somewhat from applicants whose academic profile is entirely mathematical. Your record says you can calculate and design, but also research, write, communicate and investigate complicated human questions. That breadth should become part of your application.

2. Your AP Research Project Is Significantly Stronger Than You May Realize

This may be one of the most underused pieces of your application right now. You conducted a mixed-methods research study examining the Community Eligibility Provision, school-meal

participation and social stigma across North Alabama school districts. You gathered and analyzed more than 400 survey responses, participation data and interviews with Child Nutrition Program directors. That is legitimate independent research.

More importantly, it tells us something about you. You told me that you can talk at length about economic inequality in Alabama, particularly disparities among school districts. You also identified child hunger as one of the problems in the world you would like to help solve. Now we have a pattern. The research did not happen because you needed another AP credit. You actually care about the question. That is valuable.

3. Your Engineering Interest Is Supported by Actual Experience

You want to study aerospace engineering or mechanical engineering and ultimately work in the space industry. You said you want to contribute to expanding our knowledge of space travel and data gathering. Your record supports that interest.

You have:

- Four years in the Engineering Academy
- CAD experience
- Solid Edge certification
- AP Calculus
- AP Physics
- Computer science coursework
- Engineering design projects
- Hands-on problem solving

You described spending a week debugging a difficult CAD project until you found a tiny connection-point problem. You also described redesigning a fuel-cell project after the original version traveled only about half of the intended distance.

Those stories are much better evidence of an engineering mind than simply writing: “I have always loved math and science.” We should avoid that generic story entirely. Your real engineering pattern is: **Look closely. Find the failure point. Adjust. Try again. Learn from what went wrong.** Interestingly, that same pattern appears in martial arts. That is useful.

4. Martial Arts Is One of Your Strongest Activities

Do not allow martial arts to get buried below school clubs simply because it happens outside school. Your resume shows that you teach Judo, Brazilian Jiu-Jitsu and Tang Soo Do; compete; mentor students; work with students of different ages; and hold a First Dan Black Belt in Tang Soo Do. You have also placed third at the Tennessee State Judo Championships and second at the New Breed Winter Championships.

But your questionnaire tells us considerably more. You ran a karate camp yourself for approximately 20 children as part of a Carnegie/CASA fundraising effort. You have covered entire weeks of instruction and worked with students ranging from preschoolers to adults. You have mentored younger students, including one student whom you believe became both a better martial artist and a more confident person because of your mentorship.

This isn't just athletics. It is: teaching + leadership + discipline + mentorship + resilience + responsibility. It should be one of the top activities on your Common App.

5. Music Makes Your STEM Profile More Interesting

You have four years of Chamber Choir, four years as a classically trained pianist, Performers Choir, Alabama All-State Choir across multiple years and recognition as District One Outstanding Choral Student. Do not treat music as an unrelated side hobby. It tells colleges that your brain does not operate in one lane.

You deliberately keep music in your life even while taking an unusually demanding academic schedule and pursuing martial arts. You even said that one of the skills you would most like to improve is sight reading. For a student contemplating a music minor, this is substantive enough that the interest is believable.

6. You Have Real Leadership, Not Just Titles

Your resume includes SGA, class office, Boys State, church conference leadership and other formal roles. Those are helpful. But some of your best leadership is informal.

You naturally led a choir sectional.

You mentor martial arts students.

You teach children.

You have taken responsibility for younger siblings.

You help your grandparents.

You represented youth as a voting member at the United Methodist Annual Conference.

At Boys State you served as chairman of the Welfare and Incarceration Committee and worked on proposed legislation dealing with welfare, incarceration, vocational education and housing stability. That last piece is particularly interesting because it connects with your interest in inequality and social systems. There is more coherence in your application than initially appears.

THE MOST IMPORTANT GAPS

GAP 1: Your Current Resume Still Undersells You

This is the biggest immediate issue. The factual content is strong, but the application needs to communicate **scope, responsibility and impact** more clearly.

For example, “martial arts instructor” sounds good. But this: **Teach Judo, Brazilian Jiu-Jitsu and Tang Soo Do to students ranging from preschoolers to adults; independently led multi-day instruction and organized a 20-student martial arts camp benefiting CASA** is a much stronger picture.

Same person. Same experience. Better communication. We need to do this throughout the Common App.

GAP 2: We Need to Clarify Several Resume Details

There are still factual holes I want cleaned up before we finalize anything:

- Exact SGA position for senior year
- Updated Mu Alpha Theta role, if applicable

- Exact class rank: one document shows 5/254 while the questionnaire reports 6/254
- Martial arts employment/instruction dates
- Whether martial arts instruction is paid, unpaid or a mixture
- Exact service-hour estimate
- Details surrounding the Carnegie/CASA fundraising campaign
- Amount raised, if known
- Whether Beau organized the fundraiser or was participating in a larger campaign
- Exact Boys State choir solo recognition
- Any engineering competitions or awards not currently listed
- Current senior-year course schedule
- ACT subscores, particularly Math and Science

These are information gaps, not weaknesses.

GAP 3: The College List Is Too Top-Heavy

Your current stated list is:

- Auburn
- UT Austin
- Purdue
- Georgia Tech
- Possibly Clemson

That is not yet a strategically complete college list. You have one school where I feel substantially more comfortable about admission (Auburn), followed by a collection of increasingly selective engineering options. I want at least **two additional schools other than Auburn that you would genuinely be happy to attend and where both admission and affordability are realistic**. That does not mean lowering your ambition. It means giving yourself choices. A strong applicant should use his strong record to create options, not simply accumulate reaches.

Note: *I think you should add the following two schools as “safeties” to your list and apply to Alabama, because the institutional application is free and they are generous with their merit aid, and Mississippi State.*

GAP 4: We Need to Decide Whether Aerospace or Mechanical Engineering Is the Better Application Direction

You currently say: “Aerospace engineering or mechanical — I want to do aerospace, but if mechanical is the better route then I can do that.”

That is completely reasonable at this stage. But I do not want us choosing mechanical engineering merely because we assume it is easier to enter.

At some universities, engineering admission happens at the college or first-year engineering level. At others, major selection is more consequential. We need to evaluate this school by school. Your career interest genuinely points toward aerospace. Mechanical engineering offers broader flexibility and can absolutely lead into the aerospace industry.

My recommendation is not to abandon aerospace. My recommendation is to understand the pathway at each school before selecting a major.

GAP 5: Your 33 ACT Is Strong — But One More Point Could Matter

A 33 is already a very good ACT score. For Auburn, it places you above the current middle 50% range for Alabama residents. Auburn reports a 25–31 ACT middle 50% for its Fall 2025 Alabama resident freshman class. For Clemson, the latest published middle 50% is 28–32. But Purdue Engineering, Georgia Tech and UT Austin Engineering occupy a different competitive environment.

You already plan to test again in September. I agree with that decision. **Target: 34+.** A 35 would be particularly useful. However, we are not going to delay strong Early Action applications indefinitely chasing a score.

GAP 6: You Need a Strong Application Story

Your application could easily become: “4.0 engineering student who participates in lots of activities.” That would be accurate. It would also waste much of what makes you interesting.

What I want admissions readers to see is closer to this:

You are a detail-oriented problem solver who is equally interested in systems and people — a student who can troubleshoot an engineering design, investigate why children do or do not participate in school-meal programs, teach a four-year-old martial arts and perform choral music at a high level.

There is another theme underneath that:

You like using what you know to improve something for somebody else.

That appears in teaching.

It appears in engineering.

It appears in research.

It appears in service.

It appears in your concern about inequality.

That story is much stronger.

GAP 7: We Need to Develop the Essays Now

You have several legitimate essay directions. The most promising areas I see are:

Teaching

You told us that you are unusually good at teaching and that you enjoy sharing what you know while learning from other people. There are excellent possibilities here involving the preschool martial arts class, mentoring Everett or discovering how differently different people learn.

Failure and Film Review

You talked about losing martial arts tournaments, initially handling the losses poorly, continuing to compete and eventually learning to watch recordings of the matches to identify exactly where you went wrong. That has potential because the same mindset appears elsewhere in your life.

The Detail Other People Miss

You repeatedly talk about details. People ask you for help understanding details. You found the tiny CAD connection problem. You caught a design mistake others missed. This could become a fascinating personal essay if the story is strong enough.

Becoming Your Own Person

You said what excites you about college is “being my own person” and what scares you is being on your own. There may be something very human there. I would incubate several stories before choosing one.

RECOMMENDATION STRATEGY

For the most selective engineering applications, I would strongly prefer at least one recommender who can describe Beau as a thinker rather than simply confirm that he earned an A.

The best possibilities appear to be:

- **A math, physics or engineering teacher** who has watched Beau troubleshoot, persist, ask strong questions and solve problems.
- And, where another recommendation is permitted or beneficial: **An AP Research/AP English teacher** who can speak to his research ability, intellectual curiosity and communication.
- That pairing would reinforce the exact multidimensional profile we want colleges to see.

SCHOLARSHIP GAP

This cannot be an afterthought. Your academic profile makes you a legitimate candidate for merit and honors opportunities at several schools, but scholarship deadlines frequently occur earlier than final admission deadlines.

For example, Auburn requires a complete admission file by December 1 for full competitive merit consideration and has an early-February financial-aid/scholarship priority deadline. Purdue's November 1 Early Action deadline is also its deadline for the full range of university scholarships and Honors College consideration. Georgia Tech requires applicants seeking institutional academic and merit scholarships such as Stamps consideration to apply through the appropriate Early Action round. So for you, **Early Action is not simply about receiving a decision early. It is part of the financial strategy.**

FINAL ACTION PLAN

DO NOW

- Finalize the exact college list.
- Build the complete Common App.
- Confirm senior-year classes.
- Resolve the class-rank discrepancy.
- Finalize the activity inventory and rankings.
- Begin Common App essay incubation.
- Request teacher recommendations.
- Send Beau's recommenders a strong brag sheet/resume.
- Begin Auburn immediately.
- Begin Clemson and UT Austin immediately because of the October 15 Early Action deadline.

DO NEXT

- Take the September ACT.
- Complete school-specific supplements.
- Build Georgia Tech's application.
- Build Purdue's application.
- Begin Honors applications where appropriate.
- Research at least two additional financially and academically realistic engineering options.

ENHANCE IF TIME ALLOWS

- Continue meaningful martial arts teaching.
- Document outcomes and scope of the CASA/Carnegie project.
- Continue engineering work already underway.
- Consider whether one independent aerospace or engineering exploration would genuinely interest you, not because your resume “needs a project,” but because it may help you decide between aerospace and mechanical engineering.

MONITOR

- ACT score.
- Senior SGA/Mu Alpha Theta roles.
- Scholarship announcements.
- Honors requirements.
- Engineering major selection rules.
- Application portal completeness after every submission.