



A2 Achieve Assessment for Andrew Peters Engineering Direction & Career Roadmap

CURRENT SNAPSHOT

Andrew Peters is a Mechanical Engineering student at The University of Alabama with an expected graduation date of May 2027. He has a strong academic foundation, a 3.53 overall GPA, four verified Dean's List terms, scholarship recognition, engineering organization involvement, and early technical exposure through SOLIDWORKS, MATLAB, Excel, engineering coursework, and a team-based bike frame design project.

At this stage, Andrew's resume shows strong potential, but his engineering identity is still developing. That is normal for a college engineering student who has not yet had a true engineering internship or full-time technical role. The most important next step is not to force a narrow identity too early. The most important next step is to position him as teachable, reliable, technically developing, and ready for hands-on engineering exposure.

INITIAL IMPRESSION

Traditional resumes may underestimate Andrew's:

- Academic consistency
- Ability to handle difficult engineering coursework
- Reliability in real work environments
- Teachability
- Attention to detail
- Teamwork
- Willingness to learn
- Ability to improve through feedback
- Developing technical skill set
- Potential for hands-on engineering roles

Andrew's current story is not "I already know exactly what kind of engineer I want to be." His stronger and more honest story is:

I am a strong Mechanical Engineering student with real work experience, a teachable mindset, and a serious desire to gain hands-on engineering experience so I can understand where I fit best in the field.

That is a credible and valuable position for an early-career engineering candidate.

CORE POSITIONING STATEMENT

Andrew should be positioned as a Mechanical Engineering student with strong academic performance, developing technical skills, and proven reliability in real-world work environments. He is still exploring his exact engineering direction, but he is not passive or unfocused. He is actively seeking hands-on experience that will help him understand mechanical engineering in practice.

His resume, LinkedIn, and interview strategy should emphasize:

- Mechanical Engineering academic foundation
- SOLIDWORKS and MATLAB exposure
- Engineering project experience
- Strong GPA and Dean's List consistency
- Retail logistics and customer service work ethic
- Accuracy under pressure
- Team-based work
- Willingness to learn
- Interest in hands-on engineering environments
- Openness to manufacturing, quality, testing, project engineering, aerospace, automotive, and defense pathways

CAREER GOAL ASSESSMENT

Andrew's immediate career goal is to break into the engineering field through a role that gives him real-world experience. He is targeting opportunities connected to his May 2027 graduation timeline, with interest in full-time employment after graduation and openness to an internship if it provides meaningful hands-on technical experience.

He does not yet have a specific dream employer or defined mechanical engineering specialty, which is not a weakness if handled strategically. For Andrew, the goal should be exploration with direction.

He should not present himself as unsure or desperate. Instead, he should present himself as:

- Open-minded
- Serious
- Teachable
- Eager for hands-on experience
- Interested in understanding real engineering work
- Ready to contribute while continuing to learn

A strong recruiter-facing version of his goal would be:

I am seeking an entry-level mechanical engineering role or hands-on engineering internship where I can apply my academic foundation, continue developing technical skills, and gain practical experience with real systems, products, processes, or testing environments.

BEST-FIT EARLY CAREER PATHS

Based on Andrew's answers, the strongest early paths to explore are practical engineering environments where he can learn by doing and see real-world results.

Tier 1: Strong Early Fits

Manufacturing Engineering

This could be a strong exploration path because it places Andrew close to physical systems, products, processes, equipment, and real-world problem-solving. Even though he said he is less interested in "operations," manufacturing engineering should not be dismissed too quickly. Manufacturing engineering is often much more technical than general operations and can involve process improvement, tooling, layout, equipment troubleshooting, quality support, and production problem-solving.

Quality Engineering

Quality could be a strong fit because Andrew notices when processes lack cohesion, cares about accuracy, and has experience staying detail-oriented under time pressure. Quality roles can help him understand specifications, testing, root cause analysis, documentation, process control, and how engineering decisions affect final products.

Testing / Validation Engineering

This may be one of the best exploratory fits. Andrew wants hands-on experience and wants to understand what mechanical engineers actually do. Test and validation roles would expose him to equipment, data, systems, performance requirements, troubleshooting, and engineering documentation.

Project Engineering / Technical Project Support

Andrew has shown that he notices organization, cohesion, and workflow problems. His role organizing and unifying the bike frame project report is small but meaningful evidence. Project engineering could eventually fit him if he enjoys coordinating technical work, tracking requirements, supporting teams, and keeping engineering deliverables organized.

Aerospace / Defense Engineering Support

Given his Alabama location and openness to aerospace/defense, this is worth exploring. These roles may provide exposure to complex systems, testing, design support, manufacturing support, documentation, and technical teams.

Automotive / Mobility Engineering

Automotive-related roles could give Andrew hands-on exposure to mechanical systems, manufacturing, quality, testing, and product performance. His STEM outreach experience with a car racing station also provides a small but relevant connection to this type of work.

Tier 2: Also Worth Exploring

- Mechanical Engineering Intern
- CAD / SOLIDWORKS Intern
- Engineering Lab Assistant

- Undergraduate Research Assistant
- Facilities / Plant Engineering Intern
- Process Improvement Intern
- Product Development Intern
- Maintenance/Reliability Engineering Intern
- Supplier Quality Intern
- Technical Documentation Assistant
- Senior Design-related technical roles

Tier 3: Less Strategic Unless Needed

- General retail work without technical growth
- Administrative campus roles unrelated to engineering
- Jobs that do not build technical, project, leadership, communication, or engineering experience
- Roles that are primarily sales-focused, unless they provide strong technical applications exposure

These roles are not “bad,” but Andrew’s next move should ideally bring him closer to engineering.

STRENGTHS TO EMPHASIZE

1. Academic Credibility

Andrew has a strong GPA in a difficult major, multiple Dean’s List terms, scholarship recognition, and a rigorous mechanical engineering course load. This matters because he does not yet have extensive engineering work experience. His academic record provides proof that he can handle complex material and stay consistent.

2. Teachable Mindset

Andrew repeatedly emphasizes willingness to learn. This should become one of his central themes. Employers do not expect a college student to know everything. They do expect early-career candidates to be coachable, curious, and willing to grow.

3. Real Work Experience

Andrew’s Target and Kaleidoscopes jobs are not engineering jobs, but they are still valuable. They show that he has worked in real environments with time pressure, customer expectations, physical demands, inventory systems, teamwork, and responsibility.

These jobs should not be minimized. They prove that Andrew has worked outside the classroom and understands accountability.

4. Accuracy Under Pressure

His Target fulfillment experience is useful because it shows he had to move quickly while still verifying details. For engineering roles, accuracy matters. This can translate into interview examples about checking work, handling pressure, and maintaining attention to detail.

5. Team Awareness

Andrew notices when group projects lack cohesion. He also helped organize and unify the final report for his bike frame project. This shows a practical communication and project coordination instinct. He may not see that as leadership, but it is a form of team contribution.

6. Early Technical Development

Andrew has used SOLIDWORKS, simulations, MATLAB, Excel formulas, charts, and engineering calculations. He should continue building this technical foundation and make it more visible through resume bullets, LinkedIn, and a basic project portfolio.

CURRENT GAPS

Andrew's biggest gaps are not character gaps. They are positioning and experience gaps.

Gap 1: Limited Engineering Work Experience

He does not yet have an internship, co-op, research role, or technical job directly connected to mechanical engineering. This is the most important gap to address before graduation.

Gap 2: Unclear Engineering Direction

Andrew does not yet know which part of mechanical engineering interests him most. That is understandable, but he needs a recruiter-ready way to explain it.

Instead of saying, "I don't know what I want to do," he should say:

I am still exploring my long-term specialty, but I am especially interested in hands-on roles where I can work close to real systems, products, testing, quality, or manufacturing processes.

Gap 3: Limited Portfolio Evidence

Andrew has SOLIDWORKS experience, but he does not yet have a clean project portfolio, CAD screenshots, LinkedIn project posts, GitHub, or organized folder of technical work to show employers.

Gap 4: Interview Confidence

Andrew has not yet completed an engineering interview and is nervous about interviews. This can be improved with preparation, mock interviews, and a short bank of strong examples.

Gap 5: Underdeveloped LinkedIn

Andrew does not feel his LinkedIn currently represents him well. This matters because recruiters may check it. His LinkedIn should communicate that he is a Mechanical Engineering student with academic strength, technical development, and real work experience, not just a former Target employee.

RECOMMENDED CAREER STRATEGY

Andrew should use the next 6–10 months to move from "engineering student with potential" to "engineering student with direction, examples, and a clear next-step target."

The strategy should be:

1. Build a strong engineering-focused resume.
2. Update LinkedIn to match the resume.
3. Create a simple project portfolio.
4. Use senior design as a major resume-builder.
5. Apply early and consistently for full-time and internship roles.
6. Practice interview answers before recruiter conversations.
7. Focus on hands-on roles that help him discover where he fits.

SIX-MONTH ACTION PLAN

Step 1: Finalize Resume Positioning

Andrew's resume should lead with engineering, not retail.

Recommended resume headline:

Mechanical Engineering Student | SOLIDWORKS & MATLAB Experience | Hands-On Learner Seeking Engineering Experience

Recommended summary theme:

Strong academic foundation, developing technical skills, real-world work experience, and interest in hands-on mechanical engineering environments.

Step 2: Build a Simple Engineering Portfolio

Andrew does not need an elaborate portfolio. He needs a clean, simple collection of proof.

He should create a folder or simple PDF portfolio with:

- Bike frame project summary
- SOLIDWORKS screenshots
- Brief project objective
- Design constraints
- Tools used
- His specific role
- Simulation images if available
- Final result/grade
- Lessons learned
- Senior design project section once available

Even one polished project page is better than having no portfolio.

Step 3: Use Senior Design Strategically

Senior design may become the most important resume-building experience before graduation. Andrew should treat it as a career asset from the beginning.

He should track:

- Project name
- Problem being solved
- Team size
- His role
- Technical tools used
- Calculations, testing, design, or analysis completed
- Materials, constraints, standards, or requirements
- Prototype, report, presentation, or final deliverable
- Results and lessons learned

He should save screenshots, photos, diagrams, data, and project notes as he goes.

Step 4: Update LinkedIn

Andrew's LinkedIn should communicate more than his Target job.

Recommended LinkedIn headline:

Mechanical Engineering Student at The University of Alabama | SOLIDWORKS, MATLAB & Engineering Design | Seeking Hands-On Engineering Experience

Recommended About section theme:

Andrew should describe himself as a Mechanical Engineering student with strong academic performance, developing technical skills, and interest in hands-on engineering roles involving real systems, testing, quality, manufacturing, automotive, aerospace, or project engineering.

He should add:

- Education
- Dean's List recognition
- Reasoner Family Engineering Scholarship Fund
- Theta Tau
- ASME
- Bike frame project
- SOLIDWORKS / MATLAB skills
- Target and Kaleidoscopes experience, but framed as work ethic and reliability

Step 5: Prepare Interview Stories

Andrew needs 5–6 prepared examples before talking to recruiters.

Recommended stories:

1. **Bike Frame Project** — design constraints, SOLIDWORKS, simulation, team role, report organization.
2. **Target Accuracy Under Pressure** — fulfillment orders, time limits, checking details, working quickly.
3. **Target Teamwork** — six-person inbound team, truck unloads, inventory flow.
4. **Kaleidoscopes Training** — helping newer employees learn procedures.
5. **STEM Outreach** — instructing and supervising younger students at a racing station.
6. **Vance Elementary Service** — team-based hands-on work over multiple days.
7. **Academic Growth** — improving proactivity and learning through examples.

Step 6: Apply Before Graduation, Not After

Because Andrew graduates in May 2027, he should begin applying for full-time roles during the Fall 2026 recruiting cycle. Waiting until Spring 2027 may limit options.

Recommended timeline:

Now – Early Fall 2026

- Finalize resume
- Update LinkedIn
- Build project portfolio
- Prepare interview examples
- Identify target companies and role types

Fall 2026

- Attend career fairs
- Apply to full-time engineering roles
- Apply to internships/co-ops if they are open to graduating seniors
- Speak with recruiters through Theta Tau, ASME, career services, and UA events
- Ask professors and peers about research/lab opportunities

Winter Break 2026

- Follow up on applications
- Revise resume based on senior design progress
- Practice interviews
- Reach out to alumni and contacts

Spring 2027

- Continue full-time applications
- Add senior design details to resume
- Pursue local Huntsville/Decatur/Tuscaloosa/Birmingham opportunities
- Consider post-graduation internship only if it provides strong technical experience and a path to full-time employment

TARGET ROLE KEYWORDS

Andrew should search for roles using terms such as:

- Mechanical Engineering Intern
- Entry-Level Mechanical Engineer
- Associate Mechanical Engineer
- Manufacturing Engineer
- Manufacturing Engineering Intern
- Quality Engineer
- Quality Engineering Intern
- Test Engineer
- Test Engineering Intern
- Validation Engineer
- Product Development Engineer
- Project Engineer
- Process Engineer
- Reliability Engineer
- Facilities Engineer
- Design Engineer
- CAD Intern
- Mechanical Design Intern
- Engineering Lab Assistant
- Undergraduate Research Assistant

GEOGRAPHIC STRATEGY

Andrew's strongest geographic strategy should focus on:

- Huntsville
- Decatur
- Madison
- Athens
- Birmingham
- Tuscaloosa
- North Alabama
- Roles that provide temporary housing
- Aerospace, defense, automotive, manufacturing, utilities, industrial, and engineering support environments

Because Andrew prefers Decatur/Huntsville unless housing is provided, he should be very intentional about local networking. Huntsville and North Alabama may be especially valuable for aerospace, defense, manufacturing, testing, and technical project roles.

HOW ANDREW SHOULD TALK ABOUT BEING UNDECIDED

Andrew does not need to pretend he has his entire career mapped out. However, he does need a strong answer when asked what he wants to do.

A strong answer would be:

I chose Mechanical Engineering because it is versatile and gives me the opportunity to work in many different technical environments. At this stage, I am most interested in gaining hands-on experience where I can work close to real systems, products, testing, quality, or manufacturing processes. I am still learning which specialty fits me best, but I know I want an opportunity where I can contribute, learn quickly, and better understand how mechanical engineering is applied in the real world.

This answer is honest, mature, and recruiter-friendly.

RECOMMENDED RESUME STRATEGY

Andrew should maintain two resume versions:

1. Working Resume

The working resume should include everything: coursework, projects, jobs, service, involvement, honors, technical skills, and career notes. This is the master document.

2. Targeted One-Page Resume

The targeted resume should be one page and tailored for each role type.

For manufacturing/quality roles, emphasize:

- Target logistics experience
- Accuracy under pressure

- Process awareness
- SOLIDWORKS simulation
- Coursework
- Team project work

For testing/validation roles, emphasize:

- SOLIDWORKS simulation
- Lab-based technical exposure
- Excel calculations/charts
- Engineering coursework
- Accuracy and documentation

For design/CAD roles, emphasize:

- SOLIDWORKS
- Bike frame project
- CAD coursework
- Part modeling
- Simulations
- Drawings

For project engineering roles, emphasize:

- Team project report organization
- Communication
- Cross-functional awareness
- Reliability
- Process improvement instincts
- Service and leadership evidence

INTERVIEW POSITIONING

Andrew should not apologize for not having an engineering internship yet. Instead, he should connect his current experience to engineering readiness.

Key message:

I have not yet had a formal engineering role, which is exactly why I am looking for an opportunity where I can learn from experienced engineers and contribute with the academic foundation, work ethic, and reliability I have already built.

He should be prepared to answer:

- Why Mechanical Engineering?
- What kind of engineering are you interested in?
- Tell me about your SOLIDWORKS experience.
- Tell me about a time you worked on a team.
- Tell me about a time you had to work quickly and accurately.
- Tell me about a time you received feedback.
- What are you hoping to learn in this role?
- Where do you see yourself after graduation?
- What do you know about our company?

- Why are you interested in this position?

BIGGEST OPPORTUNITY

Andrew's biggest opportunity is to convert potential into proof.

Right now, the proof is developing:

- GPA
- Dean's List
- SOLIDWORKS project
- MATLAB exposure
- Work experience
- Engineering organizations
- Service

By graduation, he needs more proof:

- Senior design details
- Portfolio evidence
- Stronger LinkedIn
- Recruiter conversations
- Interview practice
- Applications submitted early
- At least one engineering-related role, research experience, lab position, internship, co-op, or strong technical project

A2 ACHIEVE SUMMARY

Andrew is in a stronger position than his current resume may show. He has the academic foundation, reliability, and willingness to learn that employers want in an early-career engineering candidate. His main challenge is not lack of potential. His main challenge is that his resume and professional story need to become more engineering-focused.

The next version of Andrew's resume should clearly communicate:

- He is a Mechanical Engineering student with strong academic performance.
- He has developing technical skills in SOLIDWORKS, MATLAB, Excel, and engineering analysis.
- He has real work experience that proves reliability, teamwork, accuracy, and stamina.
- He is involved in engineering organizations and service.
- He is actively seeking hands-on experience to understand where he fits within mechanical engineering.
- He is teachable, serious, and ready to grow.

Andrew does not need to know his entire engineering future yet. He needs to take the next best step. That step is to pursue hands-on engineering opportunities that help him gain experience, clarify direction, and build confidence before graduation.