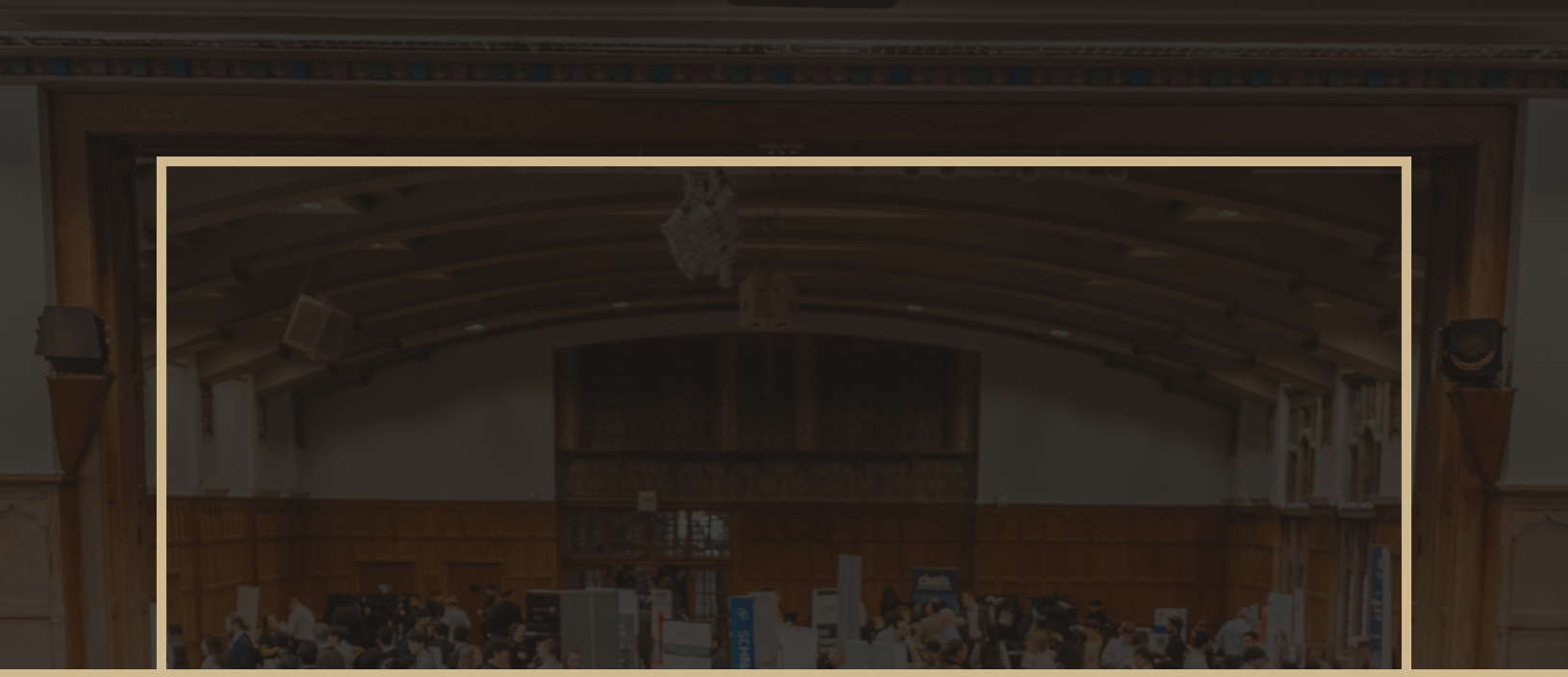
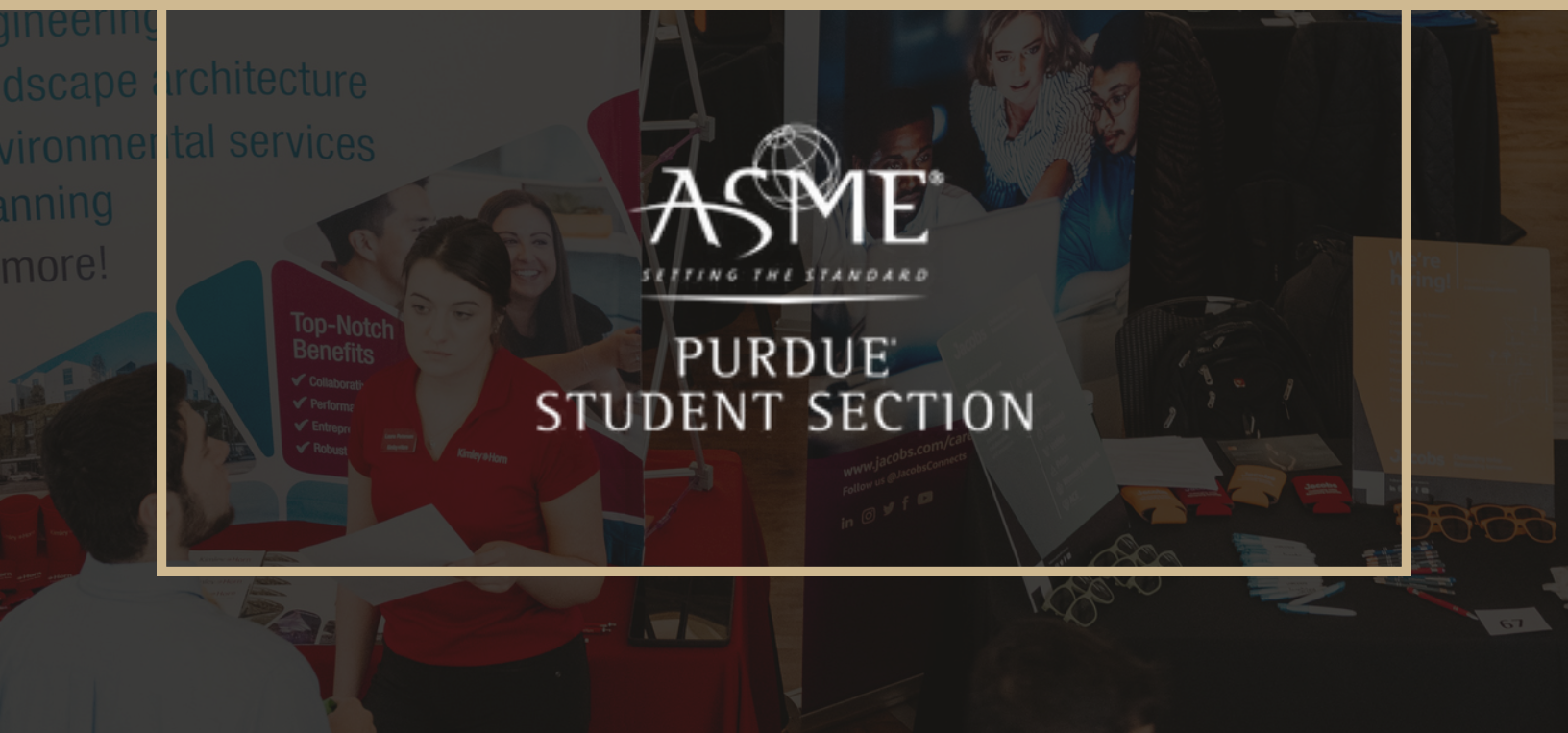


# PROFESSIONAL DEVELOPMENT

PURDUE ASME



# TABLE OF CONTENTS

# INTRODUCTION

## *We are ASME*

We are an organization that is passionate about supporting our members in pursuing interesting engineering challenges, aiding their professional development, and providing opportunities to genuinely connect to the greater Purdue community

ASME
SETTING THE STANDARD
PURDUE
STUDENT SECTION

## *What is this guide?*

This guide will introduce you to the basic principles of being professional around companies. You will be prepared for future career fairs, interviews, and so much more!

# INTERNSHIP, EXTERNSHIP, & CO-OP

## UNDERSTANDING THE DIFFERENCES

### Internship

- Typically lasts a few months (summer or semester-long)
- Can be paid or unpaid
- Offers hands-on work experience in a specific industry
- May be part-time or full-time

### Why choose an internship?

- Great for students looking to gain real-world experience and apply classroom knowledge
- Helps build a professional network
- Enhances resumes with practical work experience
- Can sometimes lead to a full-time job offer after graduation

### Externship

- Short-term shadowing experience (a few days to a few weeks)
- Usually unpaid
- Focuses on observing professionals rather than hands-on work
- Provides exposure to a specific career field or industry

### Why choose an externship?

- Ideal for students who want to explore different career paths before committing to an internship
- Allows students to gain insight into a profession without a long-term commitment
- Helps build connections with industry professionals

### Co-op (Cooperative Education Program)

- Long-term, structured work experience
- Almost always paid
- Alternate between full-time work and full-time academic semesters (so sometimes work in the spring or take classes in the summer)
- Provides deep industry experience and skill development

### Why choose a co-op?

- Best for students looking for extensive, in-depth experience in their field
- Often leads to full-time employment with the same company after graduation
- Provides financial benefits due to paid work terms
- Helps students develop stronger professional connections and expertise

### Which One is Right for You?

Choosing between an internship, externship, or co-op depends on your career goals, time availability, and need for hands-on experience. If you want a brief glimpse into a profession, an externship is a great option. If you prefer practical experience without long-term commitment, internships are the way to go. If you want an immersive experience with a potential job offer, a co-op is the best choice

Your career journey is unique—select the opportunity that best aligns with your ambitions and professional development goals

# RESUMES

## *What are resumes?*

Resumes are a great tool to show employers your past experiences and talents. A resume is the foundation of a company getting to know you!

Resumes are dynamic documents that should evolve with your experiences, skills, and career goals. What you include depends on what best highlights your qualifications and what is most relevant to your field!

# RESUMES

## *What should you include?*

- Contact Information
- Past Experiences
- Projects
- Technical Skills
- Honors/Awards

https://qr.me-qr.com/athO4qDQ

*Scan & Download Resume Templates*

## *How should you format your resume?*

- Maximum One Page
- Use Strong Verbs
  (collaborated, developed, created)
- **Bold** Job Position Titles
- Briefly Describe Experiences
- Use Lines to Organize Different Sections (no essays)
- Ensure your resume is formatted professionally and lacks typos

# RESUME SECTIONS

*How to customize your resume*

**1. Contact Information**
Include your name, a professional email address, phone number, your approximate location (not your exact address!), and link to LinkedIn or a personal website, if applicable

**2. Objective / Summary Statement (not required)**
Highlight your key skills and experiences and emphasize how you can contribute to potential employers, keep this concise

**3. Education**
Include your major(s), minor(s), certificates, and your GPA (typically when it is 3.0 or greater), You may briefly mention any activities and awards in this section

**4. Relevant Experience / Leadership**
Highlight your engineering projects, leadership experiences, past internships, and other professional experiences in this section. Include your position, the location of your experience, and the timeframe

- Use the STAR method to describe your impact (see page 35)
- Mention any industry-specific tools, software, or methodologies applied in your role

Include relevant: past internships, co-ops, & jobs / research & lab experience / engineering projects / leadership experience / extracurricular involvement / campus involvement / study abroad / volunteerism & community involvement / professional affiliations

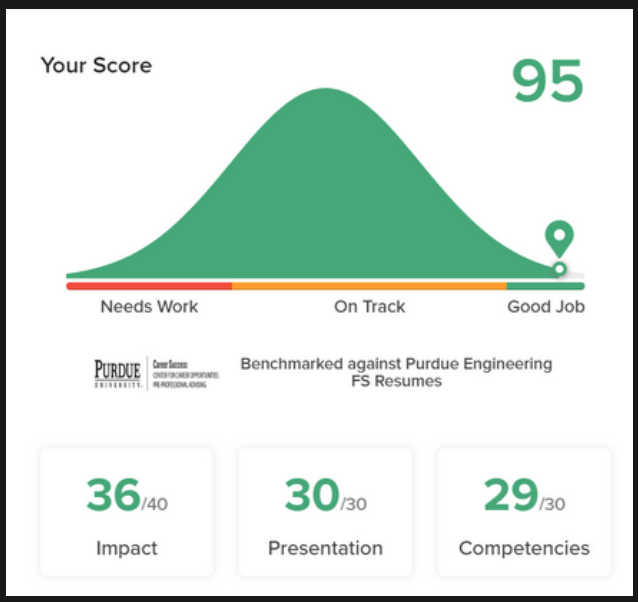
**5. Awards, Achievements, & Recognitions**
Include: honors & awards / achievements / scholarships / grants & fellowships / competitions & hackathons / presentations & speaking engagements

**6. Skills & Additional Sections**
Include: foreign language proficiencies / technical skills & software / soft skills / trainings & workshops / interests & hobbies / related coursework / certificates

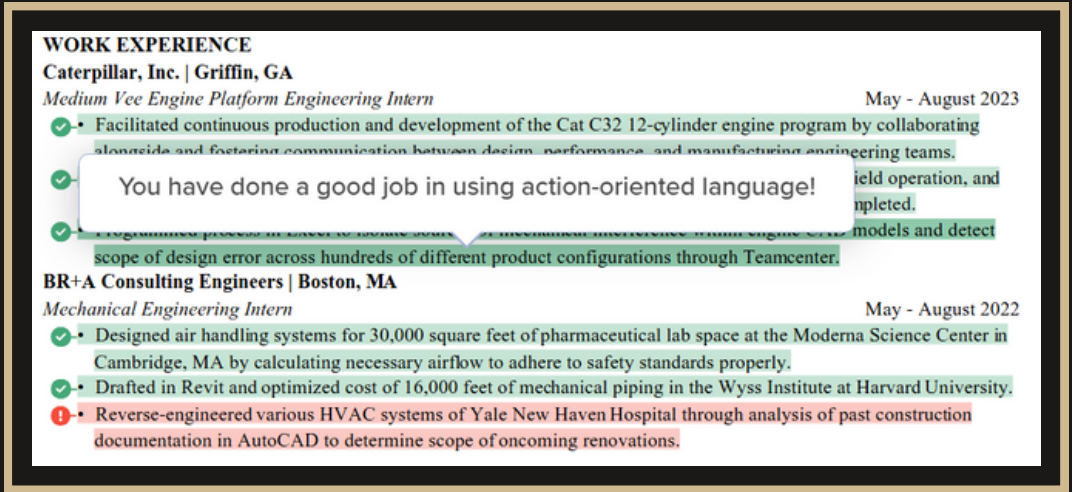
# RESUMES

*Use VMock to analyze your resume with AI*

VMock uses the same AI as real companies to show how recruiters evaluate your resume



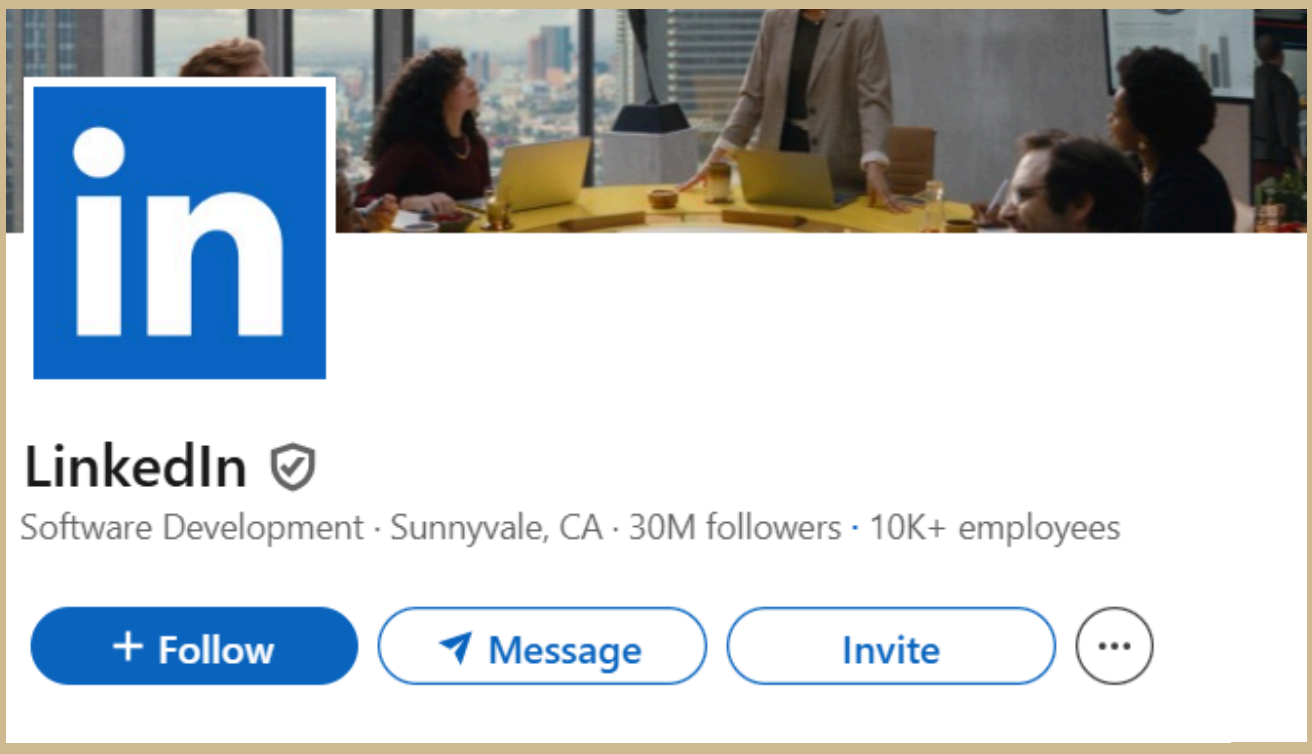

*Register for free at **vmock.com/purdue***



# LINKEDIN

## *What is LinkedIn?*

LinkedIn is social media for companies! This app enables you to portray all your traits and talents that may not have been included in your resume. Add as many qualities about yourself as you can. Like Instagram, "connect" with friends and employers to start dialogue



# LINKEDIN

*What should you include?*

- All Resume Information
- Eye-Catching Background
- Licenses
- Certifications
- Skills
- Professional Head Shot
- Verify Account

Your LinkedIn account is your resume but with more information about yourself! If an employer is interested in you, they will visit your LinkedIn to learn more than what is on your resume

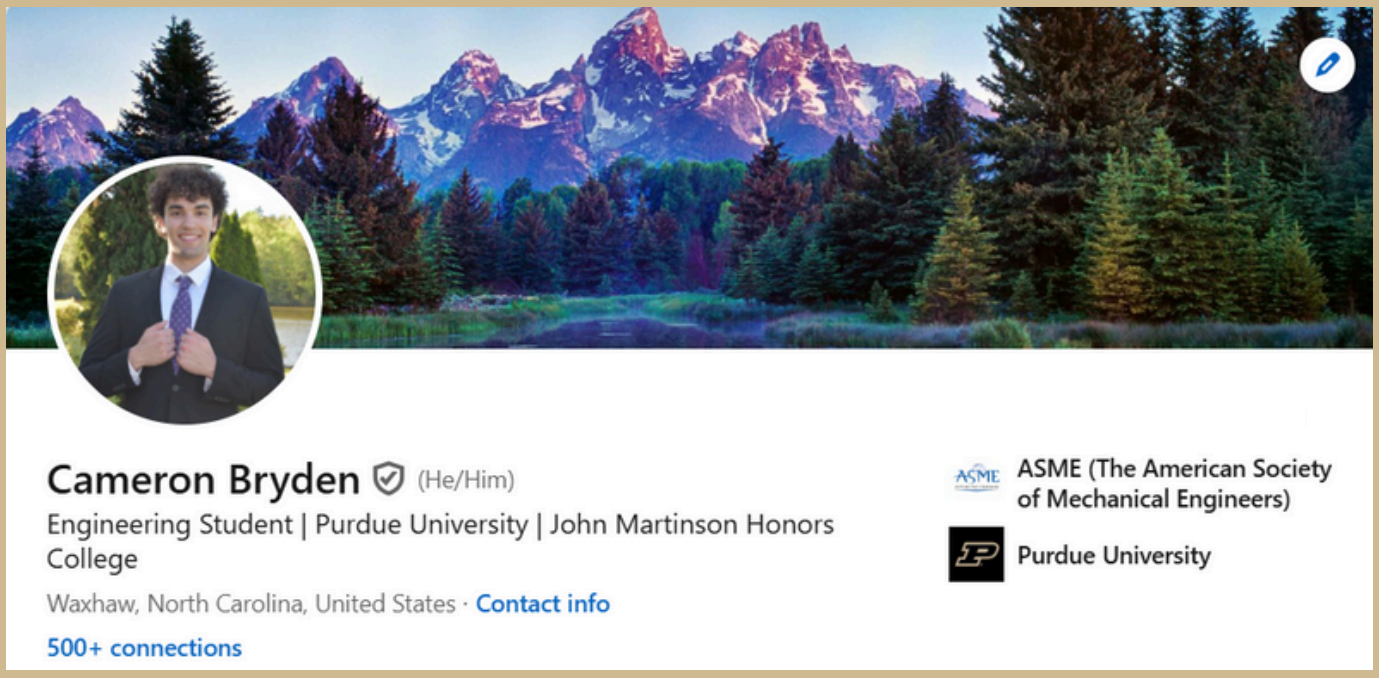
# LINKEDIN

## *Communicate*

- Connect with Friends
- Obtain 500+ Connections
- Repost
- Comment on Posts
- Spark Conversation with other Purdue Students
- Share your Profile to other Social Media

## *Network*

- Connect with Companies
- DM Companies that Interest you (Create a Relationship)
- Like and Comment on Company Posts
- Make Posts about Yourself (New Positions, Achievements, Awards)



# ELEVATOR PITCH

## *What is an elevator pitch?*

Picture yourself in
an elevator...

Within the time you enter the elevator to the time you leave the elevator (<30 seconds), you should be able to talk about your accomplishments!

# ELEVATOR PITCH

## *What do I say?*

- 30-60 Seconds Long
- Act Natural
- Introduce Yourself
- Mention your Past Jobs / Internships
- Talk about Involvements Outside a Job
  (Clubs, Sports, Leadership Positions)
- Conclude by Expressing your Interest in the Role
- Ask Questions about the Company

# ELEVATOR PITCH

## *Example*

Hello, my name is Jeremy Schumacher. I'm a senior studying mechanical engineering at Purdue University, and I am looking for full-time opportunities. I have a diverse background which includes product testing at Noble Gas Systems, an energy startup; process engineering at DENSO, a large-scale automotive manufacturer; and most recently, research and product development at NASA's Jet Propulsion Laboratory for the Deep Space Network.

Through these experiences, I've developed strong problem-solving, design, and testing skills. I'm interested in roles related to product development, design, or robotics, where I can continue to grow and learn. I saw that you have a _____ position available, which seems like a great fit, and I'd love to hear more about it.

# CAREER FAIRS

## *What are career fairs?*

Career fairs are public events in which you can talk to companies looking to hire employees. Career fairs are usually hosted on college campuses for students interested in internships, co-ops, and full-time positions

# CAREER FAIRS

## *Career Fairs at Purdue*

### ASME Corporate Banquet

**Early Fall Semester**

ASME's Corporate Banquet is a premier networking event held the day before the Industrial Roundtable, offering students the chance to connect with industry professionals, receive resume feedback, and enjoy a complimentary dinner

### Day with Industry

**Early Fall Semester**

A fair organized by minority in engineering student organizations. This event provides an opportunity before IR to network with companies and land interviews

### Industrial Roundtable (IR)

**Early Fall Semester**

The largest student-run engineering career fairs in the country. It connects students with employers for internships, co-ops, and full-time jobs through networking and interviews. The event includes company presentations, networking sessions, and on-campus interviews

# CAREER FAIRS

## *Career Fairs at Purdue*

### EXPO Career Fair

**Early Spring Semester**

One of the nation's top career fairs, attracting companies primarily in engineering, science, and technology, the EXPO connects Purdue students with employers for internships, co-ops, and full-time jobs

### Co-op Career Fair

**Early Spring Semester**

An event for students to explore co-op education opportunities with employers offering structured work experiences

### Just in Time Career Fair

**Late Spring Semester**

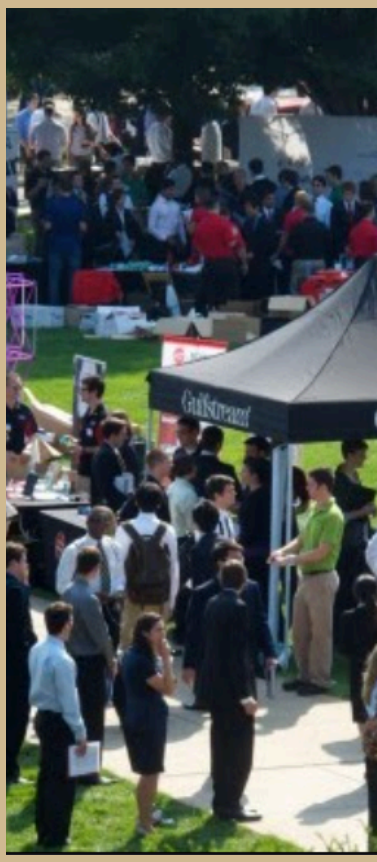
Purdue's only all-industry career fair—connect with top employers and Boilermaker talent across all majors for internships and full-time roles!

# CAREER FAIRS

*How do you prepare for a career fair?*

- Download the "Career Fair Plus" app

  Some companies are only present on certain days. You can also sign up for meetings with companies
- Find out what certain companies specialize in
- Pick ten companies that best align with your career interests
- Familiarize yourself with the locations of these companies using the app's map feature
- Create a schedule for when you want to meet with these companies



- Proofread your resume, then print ~30 resumes
- Wear a professional name tag
- Wear professional business attire
- Bring a positive attitude

# CAREER FAIRS

*What do you do during a career fair?*

- Before approaching a company, have a resume ready
- When you approach, give a resume and a firm handshake to the recruiter
- Greet the recruiter and introduce yourself
- Dive into your elevator pitch (see page 12)
- Give the recruiter time to talk about their company
- Ask questions about the company and prolong the conversation
- Ask specific questions about the role you are interested in
- Do not be a robot, bring out your personality
- Exhibit a confident but humble tone
- At the end of the discussion, offer to connect with the recruiter on LinkedIn to stay in contact
- Thank the recruiter and give them a firm handshake

# CAREER FAIRS

*Congratulations!*
*You did it! Now what?*

- If you have not already, apply online
- Using LinkedIn or email, follow up with companies you liked the most
- Write a formal communication that thanks the company for their time
- Include your continued interest for the role you applied to with their company
- From there, relax!
- Wait for a communication back from the company about an offer or interview

# INFO SESSIONS

## *What are info sessions?*


Info sessions are events where organizations share insights about their brand, mission, and employment opportunities. These sessions provide a chance to learn more about a company's culture, values, and the roles they are hiring for. Attending an information session signals to recruiters that you are genuinely interested in their company and allows you to gather key details that can help you better prepare for interviews. Purdue frequently hosts company-sponsored info sessions throughout the year, often leading up to career fairs or on-campus recruiting events

# INFO SESSIONS

*What to expect at an info session*

A typical company info session follows a structured format:

- **Introduction & Overview**: Recruiters or company representatives provide background on their organization, including history, mission, and values
- **Discussion of Career Opportunities**: Employers highlight open positions, internship programs, and career paths within the company
- **Q&A Session**: Attendees can ask questions about the company, roles, workplace culture, and expectations
- **Networking Opportunity**: Some sessions include time for one-on-one discussions with recruiters, allowing students to make a personal connection

# INFO SESSIONS

*How to prepare for an info session.*

- **Research the Company**: Visit the company's website, read recent news, and understand their industry and competitors.
- **Update Your Resume**: Bring printed copies if attending in person, or have a digital version ready for virtual sessions.
- **Prepare Thoughtful Questions**: Ask about company culture, growth opportunities, or the hiring process rather than basic information available online.
- **Dress Professionally (If Specified)**: Business casual or business professional attire is typically appropriate, even for virtual sessions. However, some events may not require professional dress, so be sure to check any provided guidelines or expectations.
- **Test Technology for Virtual Sessions**: If attending online, ensure a stable internet connection, a quiet background, and a professional username.

# INFO SESSIONS

## *What to do during the session*

*Professionalism & Engagement*

Arrive early or log in a few minutes before the session starts

Engage actively—nod, make eye contact, and participate in discussions

If prompted, introduce yourself and briefly share your major, year, and career interests

Take notes on key points, including names of speakers and any unique insights shared

# INFO SESSIONS

*What to do after the session*

- **Collect Contact Information**: Ask for a recruiter's email or connect with them on LinkedIn

- **Send a Follow-Up Email**: Thank the recruiter for their time, mention something specific you learned, and express continued interest in the company

- **Apply to Open Positions**: If the session mentioned current opportunities, follow up by submitting an application and referencing your attendance

- **Stay Connected**: Continue engaging with the company through networking events, social media, and industry-related events

# INFO SESSIONS

*In-person vs. virtual sessions*

**While both formats offer valuable insights, there are some key differences**

- **In-Person Sessions:** Allow for stronger networking, direct interaction, and the opportunity to hand out resumes
- **Virtual Sessions:** Offer convenience but require extra effort to stand out through thoughtful questions and follow-up communication

# APPLICATIONS

After a career fair, most companies will not offer you a position on the spot. They want you to apply online. When you apply online, a cover letter or project portfolio can be helpful to distinguish yourself amongst other candidates


## *What is a Cover Letter?*

**A cover letter is a way to summarize you and your experiences in one page prior to an interview. This is the best way to make yourself stand out from other applicants; you can explain how you as a person and as an engineer are the best candidate for the company and the position you're applying for**

# APPLICATIONS

*What do you include in a cover letter?*

**Letter Format**

- Start with "Dear"
- Conclude with "Sincerely,"

- [ ] Opening Paragraph
  - Restate the position you're applying to
  - Information that shows interest in that company
  - Brief preview of your relevant skills and interests
- [ ] Body Paragraphs
  - Why you want to work for this specific company
  - Your qualifications in this field with a focus on the job description
  - Avoid copying information from your resume
- [ ] Conclusion Paragraph
  - Provide contact information
  - Thank them for their consideration

**It is important to note that you should only write covers letters for positions you are truly interest in! Save yourself time!**

# COVER LETTER EXAMPLE

**Cameron Bryden**

12345 Purdue St.

West Lafayette, IN 47906

first.last@gmail.com // (123) 456-7890

**Hiring Manager**

AES Corporation

4300 Wilson Blvd Ste 1100

Arlington, VA, 22203

Dear AES,

This letter is to inform you of my interest in a summer engineering internship at AES. As a hardworking student pursuing mechanical engineering at Purdue University, I am currently building my foundational skills in mechanical, civil, and environmental engineering principles. I am also enrolled in Purdue's selective Honors College where there is a focus on the growth of leadership and communication skills. I am motivated to apply these skills to real-world issues and applications at AES, while also building upon my knowledge of renewable energy.

During my previous research experiences at the US Naval Academy Summer Seminar and Clemson's Bioengineering Summer Scholars Program, I focused on teamwork, experimental design, and research applications. Working alongside top Professors in the field of engineering, I was enlightened by theoretical concepts, gained a deeper understanding of how our world works, and got a greater appreciation of how engineering improves the quality of life each day. I am enthusiastic about the possibility of further pursuit of these topics through AES, a leader in renewable energy solutions.

As a managing lifeguard for Trident Pool Company and a Professional Development Assistant with Purdue's American Society of Mechanical Engineers, I have developed communication, problem-solving, and leadership competencies. In these roles, I have improved my time management skills in highly stressful situations such as managing a highly populated community pool and mentoring college students. I am confident in my abilities to handle unique or complex situations that may arise as an intern at AES.

I am interested in AES because of its clear focus on sustainability headlined by its innovative approach towards the improvement of renewable energy. I am eager to be a contributor to your company because I am inspired by AES' continuous focus on identifying energy solutions that are safe for the environment.

Thank you for taking the time to read this letter. I look forward to hearing back from your team and welcome the opportunity to share more about my experiences in engineering principles, research, leadership and how I believe my goals align with AES.

Sincerely,

Cameron Bryden

# APPLICATIONS

## *What is a project portfolio?*

A project portfolio is a powerful way to stand out from other applicants when applying to a highly technical position. Some companies prefer seeing "proof" of technical projects over a cover letter

## *What do you include in a project portfolio?*

Images (photos, CAD, math, code, etc.)

- This is one of, if not the, most important part of a project portfolio as other portions of the application don't include space for images

Concise, but detailed, descriptions of each project

Tailor it to the specific position/company

- Put projects in order of relevance
- Emphasize applicable details

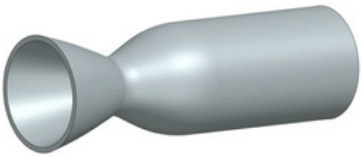
# PROJECT PORTFOLIO EXAMPLE

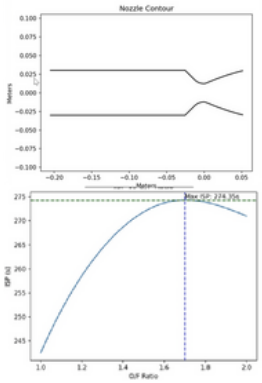

# COURTLAND BAILEY

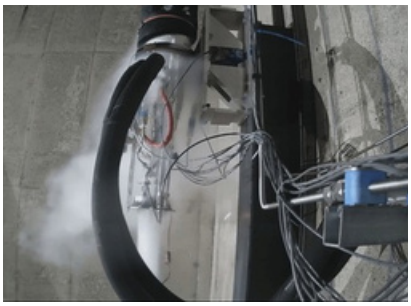
PURDUE MECHANICAL ENGINEERING PORTFOLIO

courtland662@gmail.com
bit.ly/Courtland_Bailey_Linkedin_page
(662) 655 - 8333


## OPTIMIZATION OF ROCKET NOZZLE - PURDUE SPACE PROGRAM





**What?**

- Our engine's thrust efficiency was lower than predicted, leading to an imbalance in the fuel-to-oxidizer ratio and wasting excess fuel during cold fire tests.

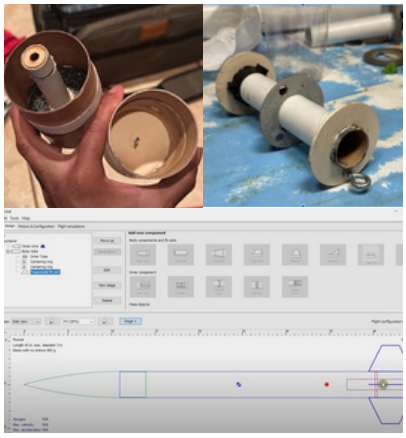
**How?**

- Developed a **Python** script to optimize the curvature of the nozzle's throat and diverging section.
- Accurately calculating the system's **maximum ISP** for enhanced performance.

**Results**

- Successfully simulated the ISP at the **optimal fuel-to-oxidizer ratio**, which was later validated through cold flow testing of the engine with liquid nitrogen

## DEVELOPMENT/MANUFACTURING OF VALKYRIE- DESOTO ROCKETRY



**What?**

- Valkyrie continuously failed to deploy the booster section's parachute during launch, resulting in a substantial amount of damage to be acquired upon the vessel

**How?**

- Simulated ideal design on **RocketSim**
- Configured a new layout of altimeter bay to ensure more accurate attitude readings
- Replaced ejection baffle with a self made **resin printed** exhaust piece

**Results**

- Resulted in both sections parachute's deploying
- Scored a **perfect score** on qualification flights

# INTERVIEWS

## *What are interviews?*

A conversation with a representative from a potential employer who asks questions to learn more about your experiences, skills, and qualifications in order to determine if you are a good fit for the available position

## *Types of interviews*

### *Behavioral Interviews*

Designed to understand how you have applied soft skills in technical settings. You are usually asked about teamwork abilities, how you handle deadlines and stress, and navigating challenges.

### *Technical Interviews*

Candidates may be asked to solve problems or answer questions to assess their knowledge and problem-solving skills in areas such as fluids, mechanics, thermodynamics, and other relevant fields related to the job.

### *Technical Presentations*

Candidates are asked to prepare and present a slideshowon past projects, focusing on their role, technical decisions, and how they overcame specific challenges.

# INTERVIEWS

## *Preparation - answering questions*

### Who are you interviewing with?

- Know what position your interviewer holds. Are they in HR? A senior engineer? Manager? This informs how you will converse with them
- Look through the interviewers LinkedIn profile beforehand if possible

### What experience do you have?

- Review your involvements/experiences thus far
- Have your resume on-hand to reference during interview
- Identify specific projects, challenges, or problems you faced that you could use to answer questions

### What is this company about?

- What do they do? What can you gather about their culture from the website? What is their primary product or project? What industries do they contribute to?

### What could they ask you?

- Prepare answers to common interview questions
- Example questions on the next page

### What could you ask?

- What do you want to know more about?
- Examples: What do you find most interesting about your work? What makes working here most appealing to you? How would you describe your team's culture?

# INTERVIEWS

## *Preparation - you & your space*

### *In-Person Interviews*

Dress: (See Page 41)

- The typical interview attire is business professional. This means suits, ties, blazers, dress pants, dress shoes, button-up shirts, etc

Makeup:

- If you normally wear makeup, do a simple look (mascara, natural lipstick/blush, and concealer are good options)
- No bright eyeshadows, glitter, or heavy eyeliner

Hair:

- Your hair is part of you! if you have long, curly, or coily hair, there's no need to change that! Wear it natural, but style it

Body Language:

- Avoid fidgeting with your hands/feet. You can add meaningful hand gestures to alleviate the need to fidget
- Maintain good posture throughout the interview

### *Virtual Interviews*

Technology:

- Make sure your camera, speaker, and microphone are all working well before the interview time

Space:

- Clean up the space visible in your camera
- No distracting posters, people, noises, signs, or pets
- Use a camera background if you'd like
- Keep the same dress code as you would in-person

# INTERVIEWS

*Answering interview questions with*


## Situation

- Detail a situation showcasing your skill
- Provide context (club, class project, research, or internship)
- Emphasize challenges or key factors that made it impactful

## Task

- Define your role or responsibility
- Explain your objectives or goals
- Highlight any constraints or limitations faced

## Action

- Describe the steps taken to solve the problem
- Explain your thought process and rationale for the decisions you made

## Result

- Summarize the outcomes (successful or not)
- Describe what you learned from the situation

# INTERVIEWS

## *Example Questions*

### Company Specfic Questions

- **What do you know about our company?**
  - Use the company website to learn the basics beforehand
  - Be prepared, but remember they are the experts on the company,
- **Why do you want to work here?**
  - Be knowledgeable of the description of the job you are applying to
  - Feel free to reference the company's values, locations, or other parts of its culture that speak to you

### Behavioral Questions

- **Can you describe a time you worked on a team?**
  - It can be teams from classes, clubs, jobs, or even high school sports!
  - Describe the team's mission, the team structure, and how your specific contributions lead to the team's success
  - Talk using "I" statements, not "we", interviewers want to understand your personal ability to succeed when surrounded by others
- **What is a challenge you had to overcome?**
  - This can be related to an engineering challenge, an interpersonal conflict, or a problem in your personal life
  - This is a great opportunity to highlight experiences you are proud of
- **What was a time when you experienced failure?**
  - The important part is explaining how you reacted to the failure
  - Explain what you learned, how you have changed, and the results of your self-improvement after the fact

# INTERVIEWS

## *Example Questions*

### Technical Questions

- **What is a thermocouple?**
  - Interviewers could ask about your baseline knowledge of fundamental engineering technologies in their field
  - Be ready to explain what its purpose is, how it works, and an application of the technology
  - For this example, you could say a thermocouple is a temperature sensor, it works by measuring the difference in voltage between two wires, and can be used to track temperature change in an engine
- **Can you draw a stress vs strain diagram for steel?**
  - This is an example of classroom-style engineering problems
  - Mention the classes you learned the concepts in, or tie in how you may have used the principle in a project
  - The exact answer is not important, but explaining your understanding the important concepts being tested is
  - For a stress-strain diagram, draw and explain the elastic and plastic deformation regions, the different yield strengths, and how the curve for steel would differ from weaker metals
- **How would you improve the design of a washing machine?**
  - Abstract design questions are used to evaluate your process and are not about analyzing the particulars of your response
  - Try to focus on tying back your experiences and strengths
  - Outline the problem you would focus on solving, what changes you would make, and why it would be an improvement
  - You could say you would like to make washing machines quieter, you could do so by adding a layer of insulating material, and this change would improve the user experience and satisfaction

# INTERVIEWS

## *Example Questions*

### Stumper Question

- **Can you estimate how many golf balls would it take to fill this room?**
  - Abstract questions are used to evaluate your problem-solving process and ability to remain calm under pressure
  - Outline the problems you are facing, explain the steps you are going to take, and execute your plan
  - Makes estimates, round values, take mathematical shortcuts when possible, and use metric measurements if applicable
  - For this example:
    - I need to find the volume of the room, the volume of a golf ball, and then divide the two values
    - This room is about 2 meters long, 4 wide, and 4 tall. So in total about 32 cubic meters
    - If I imagine a golf ball is a cube with sides of 3 cm, it will have a volume of 27 cubic centimeters
    - I need to have equal units to divide. There are 100 cm in a meter, 100x100 squared cm in a square meter, and 100x100x100 cubic cm in a cubic meter, or 1,000,000 cubic cm.
    - So I will have 32,000,000 cubic cm of space in this room
    - I can round down to 30,000,000 cubic cm in the room, and round up to 30 cubic cm for the golf ball
    - This would leave me with about 1,000,000 golf balls that could fill the room

# INTERVIEWS

## *Keys for Success*

**Take your time before responding:** Allow yourself a moment to think through your answer to ensure clarity and direction in your response

**Seek clarification when needed:** If a question isn't fully clear, asking for clarification demonstrates your engagement and willingness to understand complex issues before responding

**Express your enthusiasm:** Highlight your excitement for the role and the projects you've been involved in, which reflect genuine interest, strong work ethic, and potential for long-term commitment

**It's okay to not know something:** if you don't know an answer in a technical interview, say so. Highlight your thought process and identify what you do know

**Remember that this is a conversation:** Relax and show your true self. Think of the interview as a dialogue rather than a strict Q&A. Respond thoughtfully, ask questions back when appropriate, and share related experiences

**Conclude with questions:** Ask about steps you should take in the near future such as taking classes that boost your chances of getting a job/internship

# INTERVIEWS

## *Thank You Letter*

New Message

to: Interviewer@company.com

subject: Thank You for the Opportunity

Hello [Interviewer Name],

- Thank the interviewer for taking the time to talk with you and for considering you for the role
- Emphasize your interest in the role
- Ask any additional questions you forgot during the interview
- Offer to provide more information

Best,

[Your Name]

SEND

# DECODING DRESS CODES

*What to wear to career fairs, info sessions, and interviews*

## CAREER FAIRS

These events are more formal because you're making first impressions on recruiters, so it's best to choose Business Professional attire.

**Dress Code:** Business Professional

Men:

- Top: Dress shirt with a tie
- Suit: Matching 2-piece suit (navy, charcoal, or black)
- Shoes: Black or brown dress shoes
- Accessories: Belt, watch, portfolio, or folder for resumes
- Grooming: Clean shave or neatly trimmed facial hair

Women:

- Top: Conservative blouse or shell top
- Suit: Pantsuit or skirt suit (skirt knee-length or longer)
- Shoes: Closed-toe flats or heels (2–3 inches max)
- Accessories: Minimal jewelry, structured bag or portfolio, neat hairstyle

## INFO SESSIONS

These can vary in formality depending on the company, but generally lean toward Business Casual or Smart Casu

**Dress Code:** Business Casual (Safe Bet)

Men:

- Top: Button-down shirt (no tie), tucked in
- Bottom: Chinos or dress slacks
- Shoes: Loafers or leather shoes
- Extras: Optional blazer, belt matches shoes, clean grooming

Women:

- Top: Blouse, shell top, or nice sweater
- Bottom: Slacks, midi skirt, or ankle trousers
- Shoes: Flats, loafers, or low block heels
- Extras: Simple jewelry, neat hair, minimal makeup

Alternative: Smart Casual (if the company is more relaxed or a startup)

- Men: Polo shirt + chinos + clean sneakers or dress boots
- Women: Sweater + dark jeans or culottes + fashionable flats

## INTERVIEWS

Regardless of industry, interviews are typically Business Professional unless explicitly told otherwise.

**Dress Code:** Business Professional

Men:

- Top: Dress shirt, tie (solid or subtle pattern)
- Suit: Full suit, well-fitted
- Shoes: Polished leather dress shoes
- Extras: Neatly pressed clothes, clean haircut, padfolio

Women:

- Top: Professional blouse (no plunging necklines or loud patterns)
- Suit: Matching pantsuit or skirt suit
- Shoes: Closed-toe professional flats or heels
- Extras: Simple makeup, neutral nail polish, resume folder

## QUICK RULE OF THUMB

Sometimes, companies will specify a dress code for an event — especially for info sessions or interviews. Always check the event description or email invitation carefully. If it says "casual," you can relax a bit. If it doesn't say anything, lean toward the more professional option. It's always better to be slightly overdressed than underdressed when meeting potential employers

| EVENT TYPE | MINIMUM DRESS CODE | SAFE CHOICE |
|---|---|---|
| CAREER FAIR | BUSINESS CASUAL | BUSINESS PROFESSIONAL |
| INFO SESSION | SMART CASUAL | BUSINESS CASUAL |
| INTERVIEW | BUSINESS PROFESSIONAL | BUSINESS PROFESSIONAL |

# DECODING DRESS CODES

*Examples of smart casual, business casual, and business professional*




JCPenney
**Suit-Up Event**

Save 30% on business attire through Purdue's partnership with JCPenney by texting BOILERS to 67292

# GETTING AN OFFER:

*Congratulations on the offer!*
*Now what?*

## *Key information to look for*

- Start and end date
- Location of job
- Relocation stipend
- Role of the job
- Pay
- Response deadline

## *Don't be afraid to negotiate*

- Start and end date
- Response deadline

# GETTING AN OFFER:

## *Do some research*

- Search the hiring manager on LinkedIn and reach out
- Research the location of the role
- Look up previous interns in similar roles and reach out

## *Make a decision*

- Weigh the pros and cons (make a list!)
- If you have other offers, evaluate which one has the potential to align with your interests and career goals

# ACCEPTING AN OFFER
## NOW WHAT?

*Making the most out of the first couple of weeks*

### Meet with everyone you can

- Make sure to get to know your manager and open up an avenue of communication
- It's also great to find mentors within the company. Reach out

### Show up on time and with a positive attitude

- Even if things aren't turning out how you expected, its good to make good first impressions and be willing to learn

### Internships can be boring

- Sometimes there is not a great intern project or specific supports
- Learn about other divisions or groups, If there is another group that is interesting, most would be happy to show you around and introduce you to their work

# ACCEPTING AN OFFER
## NOW WHAT?

# *Ethics*

After accepting an offer, backing out, or reneging, can be frowned upon and can hurt not only yourself, but also the school you are affiliated with. Make sure you consider all your options before making a decision that could have consequences!

# TIPS FOR INTERNATIONAL STUDENTS

Finding a job as an international student can be challenging, but with the right approach, you can improve your chances of securing a great opportunity. Here are key tips to help you navigate the process effectively

**Research Company Background**

- Focus on companies that hire international students.
- Use reliable resources like Reddit, MyOPTJobs, or forums tailored for international applicants.
- Check job applications for notes about hiring non-U.S. citizens —only about 20% of companies explicitly mention this.

**Target Your Applications**

- For large companies like GM or Subaru, if they explicitly state they do not hire non-U.S. citizens, it's best to avoid applying to save time.
- If no information is available, consider applying anyway—you might discover unexpected opportunities.

**International Student Status**

- Mention your status as an international student upfront when speaking to recruiters.
- This helps recruiters clarify eligibility and saves time for both parties.

**In-Person Recruitment (e.g., Career Fairs & Networking Events)**

- Always double-check company policies, even if eligibility is stated on the application—some recruiters may have conflicting or updated information.
- Be prepared for mixed responses, and focus on companies genuinely open to international hires.

# NO INTERNSHIP, NO PROBLEM

*What can you do if you don't get an internship?*

## Summer Classes

- Take classes online or in person at Purdue to get ahead in your curriculum, or pursue additional minors or certificates
- You can also take classes at local universities or community colleges and transfer credits to Purdue. See the Purdue Transfer Credit Course Equivalency Guide to check if the courses you are interested in are transferable

Purdue Transfer Credit Course Equivalency Guide

## Research

- Reach out to your professors to see if they have any open assistant positions
- Consider reaching out to your local universities to see if there are research positions available in your community
- Apply to the SURF program at Purdue (or at other schools) to get a direct entry into research
- Visit the Undergraduate Research Office and Engineering Undergraduate Research Office for more opportunities

SURF Program

Undergraduate Research Office

Engineering Undergraduate Research Office

## Stipends

Look into research stipends to help cover your expenses, such as the summer stay scholarship

## Research Guide

Check out the ASME guide to Undergraduate Research to learn more

# NO INTERNSHIP, NO PROBLEM

## *Study Abroad*

- There is a variety of study abroad opportunities available in just the summer, both short and long-term
- Check out the Purdue Office of Study Abroad
- Look at the engineering study abroad programs

Purdue Office of Study Abroad

Engineering Abroad Programs

## *Volunteer*

Volunteering in your community is a great way to explore your interests and round out your experiences to show more of your personality. For volunteer opportunities, find local food banks, animal shelters, or other community organizations

## *Scholarships*

- Look into applying to scholarships, both through and separate from Purdue, they can provide amazing networking opportunities and resume clout on top of a little extra cash
- Check our NISO for more info on Purdue scholarships
- Check out the Purdue Scholarship Portal

Purdue NISO

Scholarship Universe

# NO INTERNSHIP, NO PROBLEM

## *Job Shadowing*

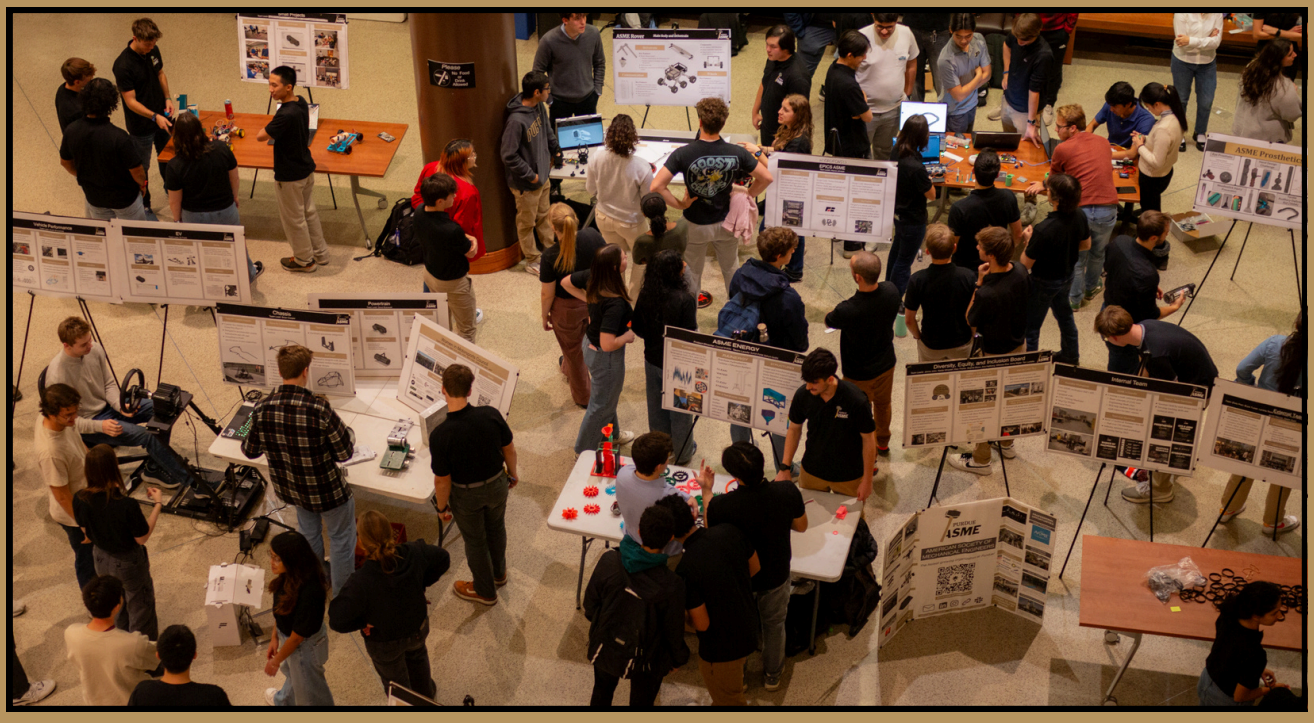
Job Shadowing consists of observing an employee working and understanding the different aspects of the job. Examples of shadowing include observation-based shadowing, hands-on shadowing, and virutal shadowing

## *Passion Projects*

Come up with a personal project to learn a new skill or practice applying your engineering knowledge from class. Examples include creating your own app, building your own robot, or 3D printing.
.

## *Summer Jobs*

Working a summer job allows you do hand get quality experience in whatever field of your interest while also making money on the side. If possible, find a summer job that consists of a lot of leadership that will provide you with leadership experience to talk about for the following round of internship applications and interviews.



# GETTING EXPERIENCE

*Looking to add experiences to your resume? Consider joining a student organization in mechanical engineering!*

@purdue_pts

The international honor society for mechanical engineers and a member of the Association of College Honor Societies.

@wimcpurdue

Connecting women interested in motorsports to empower each other and providing professional resources to succeed in the motorsports industry.

@wime.purdue

Cultivate an empowering community driven to promote academic and personal growth among women in mechanical engineering at Purdue University.

@purdue_me_ambassadors

The delegates of the Purdue mechanical engineering school in promoting unity between students, faculty, alumni, families and organizations, as well as reaching out to prospective students.

@purdueasme

Creating a welcoming community of engineers passionate about advancing their technical and professional skills.

@purduebajaracing

Design, build, test, and finally race an off-road vehicle.

@purduefsae

The team designs, manufactures, tests and then competes with a scaled internal combustion formula style race car.

@purdue_electric_racing

A professional engineering organization that aims to create a cohesive team of composed well-rounded engineers with fundamental understanding of the engineering design process and vehicle design.

# PURDUE CENTER FOR CAREER OPPORTUNITES

*If you are looking for more professional guidance, check out the Purdue CCO for more information and support!*

- Schedule 1-on-1 appointments for resume reviews, mock interviews, graduate school planning, and more!
- Keep up to date on all of the upcoming career fairs and professional development workshops
- Look through the CCO Handbook for more tips and tricks

myCCO Powered by symplicity

https://www.cco.purdue.edu

# CONCLUSION

Remember, not every opportunity will go your way but, as long you try your best and exhibit your authentic self, you will achieve long term success

# QUESTIONS?

Join the ASME group chat using the Slack app. Feel free at any time to reach out to an officer for a personal resume review or advice!

asmepurdue.slack.com

## FOLLOW US ON SOCIAL MEDIA

@purdueasme

@ASME Purdue

@purdue.asme

# ACKNOWLEDGEMENTS

**Cameron Bryden**
Purdue ASME Professional Development Associate

**Heemir Patel**
Purdue ASME Professional Development Associate

**Aashna Johri**
Purdue ASME Director of Marketing

**Natalia Zagata**
Purdue ASME Marketing Associate

**Joey Bellofatto**
24-25 Purdue ASME President

**Purdue ASME Board of Directors**
Audrey DeKoninck
Charlotte Moss
Jenna John
Jeremy Schumacher
Julia Long
Pranav Madhavan
Thomas Tilford

# FRESHMAN RESUME EXAMPLE

## Cameron Owen Bryden


CURRENT ADDRESS
1101 Third Street
West Lafayette, IN 47907

U.S. Citizen
(123) 456 7890
**cambryden7407@gmail.com | bryden@purdue.edu**
**www.linkedin.com/in/cameronbryden**

PERMANENT ADDRESS


### EDUCATION

**Purdue University,** West Lafayette, IN — May 2028
**John Martinson Honors College** — Purdue University GPA: 3.9/4.0
Bachelor of Science in Mechanical Engineering

**Relevant Coursework:** Differential Equations, Linear Algebra, Multivariate Calculus, Analytic Geometry and Calculus 1, Analytic Geometry and Calculus 2, Environmental Science and Conservation, Elementary Statistical Methods, Intro to Engineering, Intro to Chemistry, Survey of Global History, Intro to Literature
**Technical Skills:** LEED Green Associate, Python, MATLAB, CAD, Fusion, Implicit Bias Training, 3D Printing

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### Relevant Experience

**Trident Pool Company,** Charlotte, NC — May 2021 - Present
*Lifeguard | Manager*

- Trained and mentored new lifeguards in the core responsibilities of the job
- Developed teamwork skills while collaborating with fellow lifeguards, enhancing our ability to respond effectively in emergencies
- Effectively managed challenging situations as a lifeguard, honing my problem-solving skills to ensure safety of all patrons

**American Society of Mechanical Engineers (ASME),** Purdue University, IN — September 2024 - Present
*Professional Development Associate*

- Developed resources and tools for ASME students to assist in their professional development
- Engaged and actively problem-solved with ASME general body to identify particular needs in regards to professional development
- Worked with veteran ASME members to document their knowledge and experience, and effectively conveyed it to new students

**Rainenergy Design,** Purdue University, IN — August 2024 - Present
*Researcher and Collaborator*

- Conducted research on the development of a rain energy system utilizing an electric generator
- Problem-solved through the most efficient structure, ensuring affordability and sustainability
- Achieved a foundation in CAD and implemented designs to applications

**US Naval Academy Summer Seminar,** Annapolis, MD — June 2023 - June 2023
*Mechanical Engineering Researcher and Collaborator*

- Acquired marching skills and applied them to assist and instruct others, demonstrating leadership and teamwork
- Supported the platoon squad in overcoming both physical and mental challenges, exhibiting resilience and synergy

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### Upcoming Roles

**Barton Malow,** Detroit, MI — May 2025 - August 2025
*LEAPS 2025 Summer Intern*

- Accelerate the development of sustainable solutions to meet global energy demands with other employees
- Leverage engineering expertise in designing eco-friendly and efficient renewable energy applications
- Assist in identifying solutions through the analysis of RFAI forms submitted by various employees

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### Honors and Awards

*Purdue University Dean's List (1/1) | Purdue University Semester Honors (1/1)*
*National BETA Club Scholarship Winner (Only winner of 3000+ students in Union County, NC), USA*
*Soloist 1st Chair Alto Saxophone Musician in the Purdue Collegiate Band, Purdue University, IN*
*Principal's Award, Cuthbertson High School*
*Math Department Award, Cuthbertson High School*
*Louis Armstrong Jazz Award (2x), Cuthbertson High School*

# FRESHMAN RESUME EXAMPLE

## Jayden Wang

Englewood, CO |(123) 456 7890| wang6396@purdue.edu

### EDUCATION

**Purdue University,** *West Lafayette, IN* — Expected Graduation, May 2028
Intended Major: Mechanical Engineering — GPA: 4.0/4.0

- Dean's List One Semester

### WORK EXPERIENCE

**Purdue University,** *Student Assistant* — West Lafayette, IN | November 2024 – Present

- Worked as a paid student assistant within the Undergraduate Education Department, maintain their website, updating the PEPC list for new student groups, and revising major flowcharts with accurate course requirements.
- Assisted colleagues with a variety of time-sensitive tasks, managing projects based on their needs and ensuring timely completion.
- Provided weekly progress updates to supervisor, resolving issues as they arose and adapting workflows to meet deadlines.

**University of Colorado Anschutz CIQI Lab,** *Research Assistant* — Aurora, CO | May 2023 – September 2023

- Analyzed cluster cell transitions in monkeys infected with Tuberculosis and vaccinated with Bacillus Calmette-Guérin (BCG), using cosine distance and permutation tests.
- Generated Similarity metric graphs for non-BCG and BCG-protected clusters in R, applying statistical tests to assess dataset similarity and calculate p-values.
- Produced abstract figures for the submission to the 2024 Keystone TB: Host-Pathogen Interface symposium.
- Managed research tasks independently, meeting weekly with supervisor to review progress and receive feedback.

**MPM Recreation & Management,** *Lifeguard* — Englewood, CO | May 2022 – August 2024

- Regulated water levels by managing pressurized pumping systems and adjusting valves for vacuuming.
- Maintained proper chemical balance in the pool by monitoring pH and chlorine levels using titration techniques, adjusting the balance with pool shock and muriatic acid.
- Ensured patron safety in a single-lifeguard occupancy pool.

### ACTVITIES & LEADERSHIP

**Purdue Solar Racing Team,** *Member* — West Lafayette, IN | August 2024 – Present

- Contributed to the design and development of the solar car, focusing on primary braking system and the steering column.
- Led a team of 8 people to transition from U-joint to bevel gear steering system, ensuring integration with the overall system by communicating with other departments.
- Performed calculations for brake system optimization and reinstalled appropriately sized master cylinders.
- Manufactured the racing car wheel hub that connects the wheels to bearings using Fusion 360, CAM, and CNC machining.

**Purdue EPICS Columbian Park Zoo,** *Project Manager* — West Lafayette, IN | August 2024 – Present

- Managed three project teams with a total of 25 members, overseeing Animal Enrichment, Otter Interaction, and Donation Box projects.
- Directed design leads and coordinated teams to meet zoo partner goals and timely completion of deliverables.
- Collaborated with a team of five to design an animal enrichment device for the Columbian Park Zoo.
- Designed and 3D-printed custom components for the device using Fusion 360.
- Operated machining tools, including a drill press, caliper, belt sander, and wrenches, to enhance device efficiency.

**Rent Prediction Model for Off-Campus Housing,** *Developer* — West Lafayette, IN | October 2024 – Present

- Developed a supervised machine learning model using linear regression to predict rent prices based on features such as square footage, number of bedrooms, and proximity to campus.
- Processed and cleaned data from local rental listings, handling missing values, and encoding categorical variables.
- Prepared the model for deployment, enabling rent price predictions to assist students in finding affordable housing.

### SKILLS

**Engineering Skills:** NX, Fusion 360, Finite Element Analysis, CNC machining and CAM.
**Programming:** MATLAB, Python, Java, C++, C, and R
**Project Management:** Product Data Management (Teamcenter), Team Collaboration, Industry PLM, and client communication.
**Data Analysis:** Experience with statistical analysis, research methodologies, quantitative methods, and Microsoft Excel

# SOPHOMORE RESUME EXAMPLE

## LUKE VINCENT DELORENZO

(123) 456 7890 | delorenz@purdue.edu | linkedin.com/in/luke-delorenzo

### EDUCATION

**Purdue University** | *West Lafayette, IN* Expected Graduation May 2027
Bachelor's of Science in Mechanical Engineering | GPA: 3.70/4.0
**Affiliations:** Purdue Mechanical Engineering Ambassadors, Alpha Tau Omega Fraternity, ASME, PURPL

### SKILLS

**Relevant Coursework (*in progress):** Fluid Mechanics*, Mechanics of Materials*, Manufacturing for Design*, Linear Circuit Analysis*, Thermodynamics, Statics, Dynamics, Sophomore Design, Linear Algebra/Differential Equations
**Software/Processes:** NX, SOLIDWORKS, Fusion 360, Inventor, Creo, FEA (SOLIDWORKS and Ansys), MATLAB, Python, C Programming, PDM, DFM, GD&T
**Manufacturing:** 3D Printing, Soldering, Fusion 360 CAM, Lathe & Mill (Manual/CNC), MIG Welding, Laser Cutting

### ENGINEERING EXPERIENCE

**Crane Aerospace & Electronics** | *Elyria, OH* | *Mechanical Engineering Co-Op* May 2024 – August 2024

- Designed and fabricated two test fixtures for Shear Logic and Vibration Tests using PTC Creo, improving skills in DFM, GD&T, theoretical calculations, tolerance stackups, CAD, and Mechanical Drawings
- Led engineering-driven tests to validate Shear Logic performance
- Conducted Engineering Investigations into returned field pumps, identifying root causes of issues
- Engineered an inspection fixture for the Repair & Overhaul (R&O) division, boosting daily inspection rate by 15%
- Developed Excel templates for data analysis, reducing analysis time by 20% and streamlining workflow efficiency
- Authored comprehensive informational guides for Crane Co-Op students and the Crane India Design Center
- Maintained a daily log of key learnings, which enhanced my passion for continuous learning and personal growth

**Purdue Undergraduate Rocket Propulsion Lab [PURPL]** | *Turbojet Engineer* December 2024 – Present

- Developing the gaseous fuel injection system for the annular combustor of an experimental 50lbf turbojet engine, enhancing skills in Solidworks CAD & Ansys Fluent fluid analysis

**Purdue ASME** | *Executive Assistant, Racing, and Electric Skateboard Design* August 2023 - Present

- Rotating through design teams as an executive assistant to understand needs and identify how to best contribute
- Fabricating parts for a CVT-equipped Purdue Grand Prix Go-Kart using CNC Mill and Fusion 360 CAM
- Designed and manufactured an electric skateboard from the first sketch to final product using Fusion 360 CAD

**Purdue School of Mechanical Engineering** | *Undergraduate Research Assistant* January 2024 - December 2024

- Led pedal & crank prototyping for a bicycle for the 2028 Olympic Games using Fusion 360's Generative Design
- Investigated optimization of carbon nanotube distribution and process time in Selective Laser Melting (SLM)

### LEADERSHIP

**Alpha Tau Omega Fraternity** | *President & Signature Philanthropy Event Chair* December 2023 - Present

- Served as the IFC Associate Vice President of Programming and Education for the 2024 calendar year
- Navigated housing crisis following a flood of the chapter house, finding alternative housing for 58 college men
- Increased philanthropy dollars raised by 600% from Spring 2023 semester to Spring 2024 semester

**VIP LC - Purdue Aerial Robotics Team (PART)** | *Mechanisms Subteam Lead* August 2023 – January 2025

- Oversaw the design of landing gear, suspension, steering, and payload systems for a 20 lb drone in Siemens NX
- Leading by example, providing guidance, encouraging collaboration, and working alongside team members
- Facilitating productivity by offering technical insights and fostering a team-driven approach to problem-solving

### AWARDS

- Purdue University Presidential Scholarship
- Purdue University Rising Boilermaker Award (Spring 2024)
- Purdue University Dean's List (Fall 2023, Spring 2024, Fall 2024)
- English Speaking Union 2022 Regional Shakespeare Competition Honorable Mention

# SOPHOMORE RESUME EXAMPLE

## Lucas Rodrigues

Wilton, CT | (123) 456 7890 | lucaserod05@gmail.com | www.linkedin.com/in/lucaserodrigues

### EDUCATION

**Purdue University, West Lafayette** Graduating May 2027
**BS Mechanical Engineering | GPA:** 3.84/4.00

- **Organizations & Leadership:** American Society of Mechanical Engineers (ASME), Delta Upsilon Fraternity

### WORK EXPERIENCE

**Undergraduate Research Assistant | Composites Manufacturing & Simulation Center** January 2025 - Present

- Examining thermal fatigue in adhesive joints of additively manufactured Polyethersulfone composites reinforced with 25 wt% carbon fiber, replicating modular tooling for aerospace and automotive industries
- Executing Double Cantilever Beam (DCB) tests to evaluate changes in Mode 1 interlaminar fracture toughness after 1 to 5 thermal cycles, helping predict material failure and improve structural reliability
- Investigating effects of anisotropic print orientation and bonded face alignment on adhesive thermal and vacuum integrity after simulated curing cycles at 204°C

**CNC Machinist & Process Engineer | 360 Creative Visual Solutions** May 2024 - August 2024

- Optimized CNC operations across 20+ projects, improving production efficiency for large-scale commercial displays by creating path presets, tool/material data logs, and procuring specialized router bits
- Achieved $30,000+ in cost savings by reducing outsourcing and minimizing material waste
- Diagnosed and resolved 8 critical hardware failures, including sensor, motor, and power issues, ensuring minimal downtime and continuous production

### PROJECTS & EXTRACURRICULARS

**Executive Assistant | ASME Purdue Executive Board** January 2025 - Present

- Collaborating with cross-functional teams (Marketing, External, Presidential, etc.) to drive initiatives for ASME's 600+ member chapter
- Facilitating communication between design teams and ASME's 27 corporate partners, ensuring project updates and strategic alignment by developing this semester's corporate newsletter

**ASME Purdue Grand Prix Team**
**Fuel System** January 2024 – Present

- Led and coordinated a 4-person engineering team, streamlining communication and troubleshooting design inefficiencies to achieve a projected 10% fuel tank weight reduction
- Developed a dual quick-lock system, reducing pit stop tank replacement time by an estimated 70%
- Designed and modeled a high-fidelity Fusion 360 tank, integrating baffles to minimize fuel sloshing and enhance on-track performance

**Exhaust System** August 2023 - December 2023

- Conducted in-depth research on variable exhaust systems, informing the team's design strategy
- Synthesized technical data from patents and motorcycle exhaust systems, communicating key insights to the team and driving discussions during weekly meetings
- Simplified complex exhaust system concepts for non-experts, enhancing team understanding and leading the development of a structured project timeline

**Electric Skateboard Design Competition | Autodesk & ASME Purdue** January 2024 - May 2024

- Managed a $5,000 budget for tools, materials, and components to produce custom electric skateboards
- Engineered a flexible, weather-resistant battery and motor cover, integrating a layer-plated segmented design to accommodate deck flex while ensuring durability and protection

### SKILLS

**General:** GD&T, Engineering Drawings, Manufacturing Design, Manual Machining (Lathe & Mill), CNC Machining (Router), Rapid Prototyping (3D Printing, Laser Cutting), Spanish (Working Proficiency)
**Software:** NX, Python (Data Analysis), MATLAB, Fusion 360, Excel, C, Illustrator, Premiere Pro, After Effects

# JUNIOR RESUME EXAMPLE

## Emily F. Phan

Evansville, IN 47711 | (123) 456 7890 | emilyphan2013@gmail.com | linkedin.com/in/emily-phan17/

### Education

**Purdue University** – West Lafayette, IN | Cumulative GPA: 3.75/4.0 — Expected Grad 2026

- Bachelor of Science in Mechanical Engineering | Design and Innovation Minor
- Dean's List and Semester Honors

### Experience

**Toyota Motor North America** – Princeton, IN · *TMMI Engineering Co-op* — May 2024 – August 2024

East Paint Adhesion Testing Process Standards:

- Conducted 40+ trials to analyze paint adhesion properties and determined material standards for testing
- Designed and tested 3-D printed jigs for the paint adhesion testing process
- Established documentation for the proper standards and tools for the adhesion test to ensure quality paint adhesion strength through collaboration with other engineers, production team members, and Kaizen group

Other Projects:

- Investigated production line issues for paint overspray and implemented countermeasures
- Established Quality Control Tables for production robot backup procedure standards
- Created model drawings for a vehicle sub-lifter replacement project

**Berry Global** – Evansville, IN · *Thermoforming Quality Engineer Intern* — May 2023 – August 2023

QA Automated Cell Project:

- Created programs for an automated laser profiler vision system for measuring dimensions and sorting plastic cups
- Designed and tested prototype jigs for the automated quality inspection project
- Collaborated with other engineers, inspectors, production, vendors, and upper management to improve quality of products

Other Projects:

- Calibrated, programmed, and troubleshooted image capture vision system in Evansville plant; created programming tutorials for vision systems used in new plants
- Inspected parts in the quality lab, collected part data, and created process capability reports to identify existing part defects
- Assisted in auditing for ISO and SQF (Safe Quality Food) Certification

### Involvement and Projects

**Purdue American Society of Mechanical Engineers (ASME)** · *External Vice President* — September 2022 – Present

*External Vice President* (Fall 2024 – Spring 2025)

- Coordinating all efforts with corporate sponsors to ensure funding for organization of 500+ members
- Running recruitment of companies for Corporate Banquet event for 200+ students
- Organizing and hosting professional development events and company info sessions
- Leading team of Industrial Relations Associates and University Relations team
- Collaborating with the national level representatives to organize events

*Director of Industrial Relations* (Spring 2024)

- Led team of Industrial Relations Associates in creating industry connections
- Planned and hosted professional development events and company info sessions

*Sustainability Team Member* (Spring 2023 – Spring 2024)

- Researched and developed a combination of piezoelectric and triboelectric nanogenerators to utilize biomechanical energy

**Purdue Mechanical Engineering Ambassador (PMEA)** — January 2024 – Present

- Organizing and hosting student social events
- Planned and hosted resume reviews and faculty luncheons
- Led tours for prospective and incoming students around the ME department and facilities

### Skills and Certifications

**Technical:** SolidWorks | Autodesk Inventor | Autodesk Fusion 360 | Google Drive (Docs, Slides, Sheets) | MS Office | Programming languages (Intermediate): MATLAB | Siemens NX

**Personal:** Problem-Solving | Attention to Detail | Time Management | Art (drawing, painting, sculpting)

**Certifications:** AutoCAD Fusion 360 | OSHA 10-Hour Construction Safety Training

# JUNIOR RESUME EXAMPLE

## Alexa Barron

Centennial, CO | alexa.k.barron@gmail.com | (123) 456 7890 www.linkedin.com/in/alexa-barron

### Education

**Purdue University, College of Engineering** | West Lafayette, IN — Expected May 2026
*Bachelor of Science in Mechanical Engineering, Minor in Electrical and Computer Engineering* — GPA: 3.93/4.00
John Martinson Honors College

### Experience

**Purdue Undergraduate Teaching Assistant** | Purdue University | West Lafayette, IN — Spring – Summer 2024
- Elec. Eng. Fundamentals I Lab - explained concepts, graded lab write-ups, and provided constructive feedback

**Platform Product Engineering Intern** | Cummins Inc. | Columbus, IN — Summer 2024
- Analyzed and graphed data in MATLAB and Excel to investigate failure issues
- Drafted Change Requests to maintain the Product Lifecycle Management database
- Updated Product Library and implemented Excel macros to streamline processes

**Field Test Engineer Intern** | Cummins Inc. | Columbus, IN — Summer 2023
- Oversaw setup, calibration, and testing of CNC Plasma Table and developed and delivered a training program for plasma table operation for engineers and technicians, including workshops and CAD lessons
- Engineered and constructed a Diesel Exhaust Fluid (DEF) flushing cart to aid in DEF tank preservation

### Research

**Multi-Scale Robotics and Automation Laboratory (MSRAL)** — Spring 2025
- Designing and prototyping a mobile robot deployment system to transport, charge, and coordinate a team of agricultural robots (Supported by the NSF Engineering Research Center for IoT in Precision Agriculture)

**Resilient Extra-Terrestrial Habitats Institute (RETHi)** — Spring 2024
- Studied, simulated, and measured disruptions using MATLAB and Simulink, aiming to develop resilient technologies for space habitats (Research conducted in partnership with NASA)

### Leadership Activities and Membership

**American Society of Mechanical Engineers (ASME), Robotics Team** — Fall 2023 – Present
Designing and manufacturing a rover to compete in the Canadian International Rover Challenge
- *Project Director (Summer 2024 - Present)*
  - Developing short- and long-term project goals and timelines
  - Compiling resources and creating technical onboarding processes for new team members
  - Coordinating with ASME executive leaders on budgets, marketing, PLM, and project outlook
- *Systems Engineering Lead (Spring 2024)*
  - Created CAD parts for main body components, incl. integrating suspension and differential bar
  - Coordinated with mechanical, electrical, and programming teams to ensure proper workflow

**Purdue University "All-American" Marching Band** — Fall 2022 – Present
- Practice 10 hours/week with performances at local, national, and international events

**Purdue Women in Mechanical Engineering (WiME)** — Spring 2023 – Present
- *DEI Chair (Spring 2025)*
  - Represent WiME on the ME DEI taskforce, providing insight into student experiences to improve culture

**Pi Tau Sigma International Mechanical Engineering Honor Society** — Spring 2024 – Present

### Technical Skills

**Programming Languages:** MATLAB (Simulink), C, Python, Java, VBA
**CAD Application:** Creo, Fusion 360, NX, Torchmate CAD/CAM
**Manufacturing Experience:** 3D printer, laser cutter, plasma cutter, mill, lathe, saws (circular, band, jig)

### Honors and Awards

Purdue Engineering Dean's List and Semester Honors — Fall 2022 – Present
H. William Bottomley Research Scholarship *(School of Mechanical Engineering)* — Spring 2025
Teutsch Scholarship *(School of Mechanical Engineering)* — Spring 2024
Herb & Janice Wilson Engineering Scholarship *(Purdue Bands & Orchestras)* — Spring 2024

# SENIOR RESUME EXAMPLE

## Audrey DeKoninck

ajdekoninck@gmail.com | (123) 456 7890 | LinkedIn.com/in/Audrey-DeKoninck

Curious and motivated engineering student looking to leverage my experience in Product Engineering and passion for problem-solving to design innovative products that enhance people's lives.

### EDUCATION

**Purdue University** — **West Lafayette, IN**
*Bachelor of Science in Mechanical Engineering* | *Honors College* | ***Graduating May 2025*** — ***GPA: 3.95***
*Master of Science in Mechanical Engineering* | ***Graduating May 2026***

- **Awards/Honors:** 7x Dean's List and Semester Honors, ME Outstanding Sophomore and Junior Award Finalist
- **Activities:** ENGR 16100/16200 Teaching Assistant, ME 29000 Mentor, Women in Engineering Program Mentor
- **Relevant Coursework:** ME 557 Design For Manufacturability, ME 559 Micromechanics of Materials

### PROFESSIONAL EXPERIENCE

**Steelcase** — **Grand Rapids, MI**
*Product Engineering Intern – Worksurfaces & Storage* — *May 2024 – August 2024*

- Led iterative concept design, prototyping, and simulation testing for a video conference camera mounting system
- Updated 20+ worksurface CAD drawings to ensure standard compliance and increase manufacturing accuracy
- Implemented a flexible bracket design update to address tolerance stack-up issues, increasing parts within tolerance

**Stellantis (formerly Chrysler)** — **Auburn Hills, MI**
*Mechanical Engineering Intern – Interior Lighting* — *May 2023 – August 2023*

- Measured and catalogued 15+ common decorative trim materials for quick reference SPEOS analysis input values
- Planned Design For Six Sigma Customer Assessment to identify best execution of the OHC conversation mirror
- Drove allowable windshield and front window reflection zone spec development for next generation vehicles

**ROUSH Advanced Composites** — **Livonia, MI**
*Program Management Engineering Intern* — *May 2022 – August 2022*
*Engineering Quality and Manufacturing Intern* — *June 2021 – August 2021*

- Managed 3 weekly open issue meetings by tracking problem trends and assigning solution action items
- Spearheaded update and re-release efforts for 65+ departmental composite layup, trim, and assembly SOPs
- Documented 20+ composite and assembly shop procedural methods for standardization
- Implemented dimensional and visual quality inspection processes to improve overall quality of 100+ composite parts

### LEADERSHIP EXPERIENCE

**Purdue American Society of Mechanical Engineers** — September *2021 - Present*
*Chairman of the Board, previous President*

- Led strategic initiatives to provide exceptional technical and professional opportunities for 500+ members
- Enhanced member engagement and fostering diverse skill development through expanded technical offerings
- Empowered a 65+ person leadership team through effective goal setting and feedback, driving organizational success

### PROJECT & RESEARCH EXPERIENCE

**AI-Designed Bike Frame** – *ME 46300 Senior Design* — *August 2024 – December 2024*

- Utilized Autodesk's generative design features to design and optimize a performance racing bike frame
- Bridged the manufacturing gap between AI generated designs and real-world products with composite processes

**NASA Resilient Extra-Terrestrial Habitats Institute (RETHi)** – *Research Assistant* — *August 2023 – May 2024*

- Simulated disruptions and resulting damage to resilient Mars habitat to perform a component repair order study
- Improved MCVT MATLAB and Simulink program functionality through testing and problem identification

### SKILLS & INTERESTS

**CAD/PLM Software:** PTC Creo (Pro-Engineer) & Windchill, Autodesk Fusion 360, Siemens NX
**Design Skills:** DFM (Ansys Granta EduPack), DFA, FEA, Rapid Prototyping (3D printing), Testing
**Programming Languages:** MATLAB & Simulink, Python, LabVIEW, C
**Interests:** Reading, Baking, Playing Clarinet, Music and Concerts, College Basketball, Skiing

# SENIOR RESUME EXAMPLE

## Joseph Bellofatto

Westborough, MA | (123) 456 7890 | jbellofa@purdue.edu | www.linkedin.com/in/joseph-bellofatto

### EDUCATION

**Purdue University | West Lafayette, IN** *Expected Graduation: May 2025*
Bachelor of Science in Mechanical Engineering *GPA: 3.35/4.00*
- Dean's List & Semester Honors *Fall 2021 - Fall 2022*

**Technical Skills:** SolidWorks, Siemens NX, Fusion 360, AutoCAD, Revit, Python, C Programming, Java, Matlab, Excel

### WORK EXPERIENCE

**Pratt & Whitney | East Hartford, CT**
*Geared Turbofan Program Management Intern* May - August 2024
- Coordinated with engineering teams in integrating engine upgrades into fleet for program performance study
- Analyzed engine durability and financial model alongside current field operation results to identify critical discrepancies and recommended model revisions

**Purdue Experimental Turbine Aerothermal Laboratory | West Lafayette, IN**
*Undergraduate Research Assistant* January 2024 - Present
- Conducted test procedures on new combustor technology intended for application in sustainable power generation.
- Manufactured and installed fluid supply infrastructure and assessed system structural integrity.

**Caterpillar, Inc. | Griffin, GA**
*Medium Vee Engine Platform Engineering Intern* May - August 2023
- Facilitated continuous production and development of the Cat C32 12-cylinder engine program by collaborating alongside and fostering communication between design, performance, and manufacturing engineering teams.
- Investigated engine fluid control performance through statistically modeling test results and in-field operation, and initiated a product improvement probe expected to save over 2 million dollars annually once completed.
- Programmed process in Excel to isolate sources of mechanical interference within engine CAD models and detect scope of design error across hundreds of different product configurations through Teamcenter.

**BR+A Consulting Engineers | Boston, MA**
*Mechanical Engineering Intern* May - August 2022
- Designed air handling systems for 30,000 square feet of pharmaceutical lab space at the Moderna Science Center in Cambridge, MA by calculating necessary airflow to adhere properly to safety standards.
- Drafted in Revit and optimized cost of 16,000 feet of mechanical piping in the Wyss Institute at Harvard University.

### LEADERSHIP

**Purdue American Society of Mechanical Engineers**
*President (May 2024 - Present)* August 2022 - Present
- Leading an organization of over 800 students, 80 executive board members, and 9 engineering project teams.
- Tasked with managing programs to facilitate all members' personal, professional, and technical growth.

*Racing Chief Engineer (May 2023 - May 2024)*
- Oversaw the development of the first student-designed and manufactured chassis to compete in the Purdue Grand Prix in over 50 years, winning Best Engineered Kart and finishing the season in 15th place out of 70 teams
- Founded the ASME Electric Racing Team and initiated the kart's battery system and drivetrain design.

**Camp Pals**
*Camp Director - Boston Program (January - July 2022)* July 2018 - Present
- Managed and maintained a $16,000 budget for events, food, and transportation for a week-long overnight summer camp for 20 adults with Down syndrome and 25 volunteers.
- Created an inclusive environment to foster meaningful relationships between camp participants, mediated and resolved interpersonal conflicts, and maintained high morale through unexpected challenges.