Technical Portfolios
for Engineering Students

What is a technical portfolio?

Think of technical portfolios as visual albums that showcase the projects you have worked on in the past and the software or technologies that you have worked with. Technical portfolios provide employers with visual and direct examples of your technical skills and the breadth of your experience.

It definitely creates a difference in your applicaton!

Portfolio Construction Techniques

You can build your portfolio either as a website or as an electronic document that may be printed or enclosed as an attachment to any applications along with your resume.

1 Build your portfolio to the type of role that you want

Showcase technical projects that align with requirements for your dream job. Employers would feel more confident in your qualifications if you have produced similar work as the roles you are applying to throughout your career.

2 Choose a clean and appealing format

Your portfolio should be easy to read and navigate through. There are no page or word constraints to portfolios, so you may use as much space as you want. Include your name and contact information for easy access.

The best format will cover one project per page, with a description on what the project entailed with as much visual aspects (i.e., pictures, diagrams, or GIFs (if creating a website)) as you could fit.

3 Describe what you did or what you contributed

Discuss the goals or purposes of the project and how you contributed in successfully completing it. You may include details on what software or tools you used, the difficulties you have faced and how you have overcome them, and what new skills you have picked up throughout the project.

If applicable, include before-and-after or start-to-end pictures of the project! This will really showcase the extent of the work you have completed and the significant changes that you have contributed.
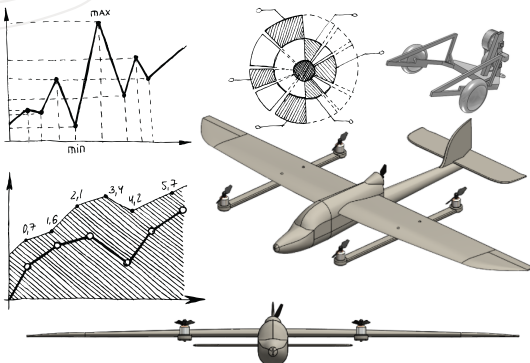
How To Use a Portfolio

Include it into your application package to send it alongside your resume & cover letter. During interviews, you can also print and hand out a copy of your portfolio along with the resume and cover letter to boost the conversation!

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Design of a small VTOL aircraft

Purpose: To design an aircraft with vertical takeoff and landing capabilities (VTOL) while achieving high cruising speeds

Team: Working with a design team of seven (7) undergraduate aerospace engineering student, my primary focus was on working on the fuselage, engine, and cooling system designs.

Project Requirements: Minimum takeoff weight of 7000 kg, cruising speed of 275KTS at 18000 ft above ground level.

Contributions: Calculated the weight and balance of the aircraft by applying engineering design principles and applying AS91XX standards in the design. Applied lift and drag equations. Simulated loading on an aircraft structure using Software X and created a 3D model in Design Software Y.