DEVELOP YOUR RÉSUMÉ & REFERENCES

Add job goals to your skills assessment. Include work-related and academic experiences and extra activities.

The process of developing a résumé is an extension of your self-assessment. Unless you have thoroughly and honestly determined what your skills are and identified specific situations in which you have either developed or successfully used your skills, your résumé will not be distinctive or effective. Keep in mind that résumé writing is not rocket science, but neither is it simple. It requires careful thought, attention to detail, and understanding of purpose. Prior to working on résumé specifics, please keep in mind the following important ground rules:

TEN RÉSUMÉ BASICS

1. Be concise
The length of your résumé depends on your skills and experience. You may need more than one page to effectively state your strengths, but do not use space carelessly. Most undergraduates develop a one-page résumé; MS students and alumni may require two, while PhD candidates' resume may be three pages or more when including publications, presentations and references. Key information such as degrees and titles should be easy to find. Arrange the information by importance.

2. Know your objective
Your purpose in writing an effective résumé is to obtain an interview and to guide your interview discussion. Customize your résumé for the opportunity.

3. You cannot write a résumé in an hour or two
Writing an effective résumé is time-consuming, and requires planning, feedback, edits and adjustments. In fact, a résumé is never "complete." Adjustments continually improve content and format.

4. Presentation matters
Your format or layout should be professional, consistent and logical. Avoid using a template.

5. Use keywords
Employers search résumés for keywords. List every primary software tool, instrumentation, research method, and computer language. Read current job postings and employer websites to determine key skills currently sought after. Include buzzwords in your area of interest that match your search and skillset.

6. Spell check *(with U.S. English version)*
Don't simply rely on MS Word's spell-check function. For example, "software" and "soft wear" are both correct in the "eyes" of the computer.

7. Ask for feedback
You may be a good engineer and researcher, but you probably are not an expert in résumé writing. Consult the ECS staff and others with experience in current employment practices. Listen carefully and make wise decisions regarding the development of your résumé.

8. Think of résumés as advertisements
For each advertisement, there is a target audience and the advertiser emphasizes the most important and relevant information. Relate this approach to résumé writing. Sparingly use bullets, boldface or italics to emphasize details. Generally, one form of highlighting for a specific entry is sufficient.

9. Fifteen minutes of fame
Any topic on your résumé welcomes a question. Can you talk about your academic project, ASME membership, computer skills or leadership role for 15 minutes? Your résumé lists and describes events; the interview validates them. When writing your résumé, think about the next step—the interview!

10. Do not pay anyone to develop your résumé
They don't know you and it's really expensive.

QUICK TIPS

Do not simply list your degrees and jobs.
Use what you learned in your skills assessment to fully develop each section of the résumé.

YOUR CONTACT INFORMATION

Beyond the basics of providing your name, email address, phone number, and mailing address, consider how employers will use this information: They will contact you for a phone interview to determine your interest in their organization, to notify you about an interview, or to solicit more detailed information regarding your qualifications.

Routinely check your email and voicemail during your job search. Update your voicemail message with a professional

greeting that includes your full name. Always answer your phone with your name: "Hello, this is Patel." Let your cell phone go to voicemail if the caller might be a recruiter and you are headed into class or somewhere noisy and inconvenient for a professional conversation.

QUICK TIPS

Be accurate and complete in providing specific contact information for employers. Keep in mind that they are working in a fast-paced, business setting. Stay professional; check messages often.

HOW TO WRITE IT

Yijun (Yvonne) Wong
U.S. Permanent Resident

Yywong2@wisc.edu
1150 Engineering Drive, Madison, WI, 53706, 608.262.3471 (office), 608.274.7599 (cell)

Include preferred first name if different from given name. If you are often asked if you are an international student and you are not, consider providing this information below your name.

Use your @wisc.edu or @uwalumni.com email address. Co-op/intern candidates should include your hometown address if you are looking for a job near your home.

Erin J. Tachmeier

Campus		Permanent
1330 E. Gorham St., #9	tachej@wisc.edu	3900 Lake Cheyenne
Madison, WI 53706	608/266-5791	Port Mark, IL 60600

OBJECTIVE STATEMENTS

Some people say you don't need an objective. However, your objective statement is the single-most important part of your résumé. It provides focus for your résumé. The rest of your résumé must support the objective by providing educational, academic and/or real-world experiences related to the objective.

A strong objective statement will:

- Be employer-oriented *(what you can do for employer)*, rather than self-oriented *(what you want to gain)*
- Include specific functional areas of interest *(based on your education and experiences)*
- State the type of opportunity you are seeking: co-op, intern, entry-level, etc.
- Not be too specific or too broad in scope
- Be tailored to the position as much as possible: Include the employer name, job title, location, etc.

QUICK TIPS

- **The objective statement serves as the "thesis sentence" of your résumé. The rest of your résumé supports your objective with academic projects, co-ops or internships, research areas and leadership experiences.**
- **Be employer-oriented, rather than self-oriented.**

See page 10 for action verbs.

HOW TO WRITE IT

- Geological engineering co-op opportunity with Employer ABC in water resources management or remediation for 2 work terms.
- Intern position in a structural engineering design firm. Seek broad responsibilities in wood, steel, reinforced concrete and/or pre-stressed concrete design of buildings and/or bridges.

Justify use of every word.

Use field-specific key words.

HOW ~~NOT TO WRITE IT~~

- Electrical engineering position, preferably in automation/control systems or digital/analog circuit design ~~where I can apply and enhance my technical skills~~.
- ~~To utilize problem-solving skills in the visualization and application of concepts in the~~ design ~~of~~ diesel engines at Employer BD to reduce emissions and decrease fuel consumption. Seek entry-level position.
- ~~To obtain a team-oriented~~ position performing dynamic analysis of large structures or failure analysis at Company AC ~~in a dynamic environment within a high-tech, cutting-edge organization~~.

Eliminate words or phrases that do not add value.

FUNCTIONAL AREAS

Within the objective statement it is important to include 2 to 3 specific functional areas of interest (based on your education and experiences). Only if you are willing to significantly limit your employment opportunities should you list only one specific interest or engineering functional area. PhD candidates can sometimes justify this focused job search. Most BS and MS students and alumni, however, will have a broader area of interest to maximize job opportunities. Use the examples above to add special interest areas to your objective statement.

Consult past and present postings for similar jobs, and your departmental website, both of which list specific focus areas of study, to help you properly phrase technical interest areas. (See action verbs on page 10.)

EDUCATION SECTION

In this section, include post-secondary degrees earned or in progress in reverse chronological order. Include all degrees. Format the section to be consistent with your next section, “Experience.”

Freshmen and sophomores may include relevant high school information such as class rank. Provide your overall GPA; you should include your major GPA if it is significantly higher than your overall GPA.

Include academic projects (with brief descriptions), significant coursework, academic honors and senior projects in this section if you do not have related work experience or if they are directly linked to your objective.

QUICK TIPS

- **Identify the degree and level (i.e., BS Chemical Engineering), expected degree date, institution and GPA.**
- **Use the official name of the school: University of Wisconsin-Madison.**
- **List study abroad experiences.**
- **Possibly include brief descriptions of class academic projects, "selected" course listings, scholarships and other honors.**
- **Be sure your degree is correct. Department names and degrees differ—for example, "Industrial Engineering" (degree) vs. "Industrial & Systems Engineering" (department name).**

HOW TO WRITE IT

Education

University of Wisconsin-Madison
B.S. Mechanical Engineering, expected May 20XX

- Major GPA 3.2/4.0 Overall GPA 2.9/4.0

Academic Design Projects

- Turf Smurf: Designed and fabricated a device that simulated golf cart wear on various grasses for a turf grass company as a member of an interdisciplinary team.
- Rowing Exercise Machine Modification: Worked with corporate customer to design, fabricate and implement a universal rowing machine usable by people with multiple sclerosis, cerebral palsy, and paraplegics. Developed prototype and presented project to group.

Selected Coursework

- Advanced Graphic Analysis, Materials Selection, Manufacturing Processes, Energy Systems Laboratory, Electronic Circuits and Power Conversion, Construction Project Management

PhDs: Limit Education section to degree, date expected, advisor and thesis topic.

List research and teaching assistantships in Experience section.

If little or no work experience: List and describe academic projects. Possibly include projects outside your major to illustrate your qualifications and/or interest areas. Use unique coursework listings for this purpose, also.

EXPERIENCE SECTION

The content of your experience section is critical and more flexible than you may think. You may include experiences that are related or unrelated (to engineering), as well as paid or unpaid.

Your goal is to develop an "Engineering Experience" section. First, list related engineering work, including co-op or intern experiences. Use phrases describing the skills you have developed or used, projects on which you worked, and results or goals you met or exceeded.

You might include significant academic projects in the Experience section (rather than Education) to call more

QUICK TIPS

- **Include academic projects here (if not included in Education). Describe them as if they were work experience. Research projects are experience.**
- **Include non-engineering work—emphasize skills rather than duties.**

attention and allow more space to describe them, especially if you do not have co-op or internship experience. You may include teaching and research positions, volunteer, and leadership experiences.

Include keywords in describing your work. Be quantitative whenever possible—for example, "reduced processing time by 10 percent" or "managed $1M design project." Include skills you have developed, awards you have won, and results you have achieved. In most cases, you'll list your experiences in reverse chronological order.

It is optional to deviate from this guideline to emphasize unique experiences. If, for instance, you last worked as a summer landscaping assistant while the previous semester you were an engineering intern, break the Experience section into two: Engineering Experience and Additional Experience, so you can list the internship first.

HOW TO WRITE IT

ENGINEERING EXPERIENCE

Kohler Co., Kohler, WI
Co-op Engineer, May 20XX–January 20XX

- Developed and fabricated acoustic scanning robot. Monitored exhaust emissions.
- Worked with team of multidisciplinary engineers in sound power analysis.
- Co-presented final project to management.

RELATED EXPERIENCE

Bob-O-Link Golf Course & Country Club, Highland Park, IL
Caddie, Summers 20XX–20XX

- Developed strong interpersonal skills in working with customers and management.
- Enhanced strong work ethic by working 12-hour days for three months each summer. Saved $9,000 over four summers. Promoted to caddy master in 20XX.
- Trained and supervised new hires.

OR

ENGINEERING EXPERIENCE

Engine Research Center (ERC), University of Wisconsin-Madison
Research Associate, September 20XX–present

- Developed a finite element-based program, HCC, for prediction of I.C. engine component temperatures.
- Incorporated a Discrete Ordinates Method radiation model into the CFD code, KIVA.
- Served as technical contact between ERC and Diesel Combustion Collaboratory.

Atmospheric & Oceanographic Science, University of Wisconsin-Madison
Engineering Consultant, December 20XX–present

- Rewrote the atmospheric weather prediction program, NHS, to run on a massively parallel scale.

Academic Design Project, Turf Smurf, *Introduction to Engineering Course*

- Designed and fabricated a device that simulated golf cart wear on various grasses for a turf grass company as a member of an interdisciplinary team.

Use descriptive phrases to emphasize what you did and how you did it. Use action verbs and keywords, as well as quantify the scope of a project (use #, %, or $).

Do not overuse the same action verb.

ADDITIONAL EXAMPLES

- Updated drawings in ProEngineer. Entered and verified data for SAP upgrade. Entered and obtained data for-online catalog. Served as German translator.
- Developed code to extrapolate 3-D data from 2-D paraboloid model for wall-shear rate measurements in the carotid artery.
- Analyzed corporate quality system to conform to new norm–ISO 9000 (Vision 2000).
- Completed critical analysis of operational and management processes at three MTS production locations in Italy.
- Managed operations on $2M family grain farm.
- Acquired invaluable mechanical aptitude as a result of continuously scheduled and unscheduled maintenance of large farm equipment.
- Measured the modulus of elasticity, shear modulus, mechanical damping in bending and torsion, specific gravity and moisture content of toothpick-sized specimens.
- Led weekly meetings (of 8) to facilitate continued discussion, problem solving and completion of research.
- Enhanced experience with various instrumentation tools, including digital oscilloscope, microscope, lock-in amplifier, split diode laser and light detector.
- Designed a strategic drain mechanism in Pro-E.
- Designed an Excel Macro using Visual Basic to convert raw leak test data into usable charts and tables.
- Performed daily testing and implemented adjustments to ensure optimal equipment operation. Helped determine sources of contamination during operation.
- Developed vehicle concepts for an entry-level drag and circle track race team.
- Overhauled and modified race engines, design with mechanical principles learned in college.
- Developed a powertrain for a 12-second per-mile drag car. Required physical application of theoretical concepts.
- Maintained, troubleshot and repaired various machines such as heart-lung, ventilators, gamma knife, X-ray, pacemaker, defibrillators, blood cell counters, laboratory machines, viewing wand and others.

Deliberately write your résumé so that the employer can find keywords through visual or electronic scans.

ACTION VERBS

Use consistent verb tense (generally past tense). Start phrases with descriptive action verbs. Supply quantitative data whenever possible. Adapt terminology to include key words. Incorporate action verbs with keywords and current "hot" topics, programs, tools, testing terms, and instrumentation to develop concise, yet highly descriptive phrases. Remember that résumés are scanned for such words, so do everything possible to incorporate important phraseology and current keywords into your résumé.

From What Color is Your Parachute, Richard Bolles, 2005

achieved	**delivered**	**founded**	**motivated**	**resolved**
adapted	**detailed**	**gathered**	**navigated**	**responded**
analyzed	**detected**	**generated**	**operated**	**restored**
arbitrated	**determined**	**guided**	**perceived**	**retrieved**
ascertained	**devised**	**hypothesized**	**persuaded**	**reviewed**
assessed	**diagnosed**	**identified**	**piloted**	**risked**
attained	**discovered**	**illustrated**	**predicted**	**scheduled**
audited	**displayed**	**implemented**	**problem-solved**	**selected**
built	**dissected**	**improvised**	**proofread**	**served**
collected	**distributed**	**influenced**	**projected**	**shaped**
conceptualized	**diverted**	**initiated**	**promoted**	**summarized**
compiled	**eliminated**	**innovated**	**publicized**	**supplied**
computed	**enforced**	**inspired**	**purchased**	**surveyed**
conducted	**established**	**installed**	**reasoned**	**synthesized**
conserved	**evaluated**	**integrated**	**recommended**	**taught**
consolidated	**examined**	**investigated**	**referred**	**tested**
constructed	**expanded**	**maintained**	**rehabilitated**	**transcribed**
consulted	**experimented**	**mediated**	**rendered**	**trouble-shot**
controlled	**expressed**	**mentored**	**reported**	**tutored**
counseled	**extracted**	**modeled**	**represented**	**unified**
created	**formulated**	**monitored**	**researched**	**wrote**

OTHER RÉSUMÉ SECTION HEADERS

While the previously mentioned résumé sections—Contact Information, Objective Statement, Education and Experience—are expected on your résumé, you should include other relevant information—for example, Honors & Awards, Scholarships, Memberships, Patents, Research Interests, Teaching Interests, Publications, Presentations, Interests, Volunteer Activities, International Experience.

HOW TO WRITE IT

Leadership **S.U.B.E. (Society Uniting Business and Engineering)**

- Vice President

Computer Skills C++, HTML, Java, Visual Basic, Adobe InDesign, Adobe Photoshop, Excel, Access, Project, Dreamweaver, Maple, Matlab, Promodel, R, XLISPSTAT, SPSS, MOST, PIMS

Skills

Global Languages	Fluent in Cantonese: Basic understanding of Mandarin
Computer Languages	C++, Java, Python, SQL, Ruby
Computer Programs	PRO-II, CapCost, Windows, WorkflowMax

Publications

R.M. Jones and M.D. Graham, "Macromolecules in Microdevices: Multiscale Simulation of DNA Dynamics in Model Microfluidic Geometries," submitted for publication.

R.M. Jones and M.D. Graham, "Macromolecules in Microdevices: Multiscale, Simulation of DNA Dynamics in Model Microfluidic Geometries," Technical Proceedings of the 2005, International Conference on Modeling and Simulation or Microsystems.

R.M. Jones and M.D. Graham, "Stochastic simulations of DNA in Flow: Dynamics and the Effects of Hedrodynamic Interactions," Submitted to J. Chemical Physics.

Activities

- Society of Women Engineers, Past-President
- Badger Robotics Team
- Campus Political Organization
- Skiing, Hiking, and Running

Presentations

R.M. Jones (speaker), J.J. de Pablo, and M.D. Graham, "Macromolecules in Microdevices: Multiscale Simulation of DNA Dynamics in Model Microfluidic Geometries," to be presented at the Fifth International Conference on Modeling and Simulation of Microsystems (20XX), San Juan Puerto Rico, USA

WORK AUTHORIZATION

If you are studying in the United States on a student visa or other temporary visa, it is important that you understand your employment privileges and restrictions. Contact the International Student Services Office regarding employment regulations, Curricular Practical Training (CPT) and Optional Practical Training (OPT).

Visit **www.iss.wisc.edu** or call (608) 262–2044.

SAMPLE RÉSUMÉS

On the following pages are four sample résumés and one reference page sample that illustrate different layouts for various types of résumés. As an overall guideline, aim for simplicity of design and layout.

- **B.S. résumé sample 1**
- **B.S. résumé sample 2**
- **M.S. résumé sample *(2 pages)***
- **PhD résumé sample *(3 pages)***
- **References page sample**