

CHEMICAL ENGINEERING RÉSUMÉS

1. There is no absolute right format. This is your personal work, so create a résumé that represents you well and that you like. However, be sure that you follow basic guidelines:
 - A. Make sure your résumé says the most about you in the fewest number of words (one page is recommended for bachelor's level students, 2 pages for graduate students...but there are some exceptions, e.g. more than ten years of employment experience).
 - B. Be consistent with your format! Margins, bolding, capitalization, bullet points, and style must be consistent as well as order and style of information.
 - C. Proofread for typing and spelling accuracy.
2. Only items leading directly to setting up an interview should be included. Keep your résumé specific to the job you are applying for, even if that means having different résumés for different jobs. (E.g. one résumé for research-related positions and another for sales positions) Salary requirements, supervisor's names, abbreviations, clichés, reasons for leaving jobs, personal opinions and personal information such as height, weight, age, marital status, etc. should be excluded.
 - A. Required Categories: (Heading) Name, Home Address, Phone Number (Note: Be sure your phone number is prominent. Employers who cannot find--or read--your telephone number will not call!), Email Address; (Body) Education (incl. GPA if above a 3.0; do not include your collegiate GPA if you do not yet have one), Experience (Work and/or Activities).
 - B. Optional Categories: (Body) Objective or Summary of Qualifications, Relevant Coursework, Honors & Awards, Activities or Leadership, Credentials, Skills (technical skills only: computer, lab, languages), Publications, Presentations, Professional Affiliations, and Other.
3. If you do include an objective, be sure that it shows your career goals. It must be narrow and specific and include your strengths as they apply to the position. (e.g. To utilize my education in Chemical Engineering and excellent communication skills as a Product Engineer at a growing company to create advanced products in a team setting)
4. Both the résumé and cover letter should be examples of your best work! Maintain a positive tone by excluding negative aspects of your experience.
5. Choose a conservative font such as Helvetica, Times, Courier, Geneva, New York, Palatino, or a Sans Serif font no smaller than 10 and no larger than 14. Include as much "white space" as possible for easier scanning by the employer, maintaining approximately 1" margins.
6. Make your résumé look professional. If you make a hard copy, use only a laser printer on good quality bond paper. Use white, off white, or a light blue or gray, 8-1/2" X 11" bond paper. (Remember that your potential employer may photocopy your résumé, so be sure that the paper is not too dark or "blotchy" to photocopy well!).
7. Be specific with dates, job titles, employers, interests, and accomplishments. Items within each section should be in reverse chronological order (most recent first and back from there). Be complete and descriptive without being too long. Always be completely accurate and truthful!
8. Use what is called telegraphic style. Omit all personal pronouns (I, we, they, you, etc.). Use incomplete sentences in list form (no paragraphs!) without punctuation.
9. Use results oriented, "action verbs" in describing your experience. Words such as administered, coordinated, developed, created, implemented, managed, and prepared are keys in telling employers what you have accomplished. Use past tense unless you are describing a job you are currently doing (in which case present tense or past tense is acceptable). Career Services has additional recommendations for action verbs.
10. Do not staple, paper clip, fold, or put your résumé in a folder. Use the larger 9" X 12" envelopes if you have to mail your résumé and be sure watermarks (if your paper has them) are right-side up.

For more information or assistance with a résumé or other job search question, please contact us at:
School of Chemical Sciences Career Services
105 Noyes Laboratory
217-333-1050 • careers@scs.illinois.edu • <http://careers.scs.illinois.edu/>

EXAMPLE 1: Entry-Level BS Chemical Engineer

JOHN T. LEIBOWITZ

2334 S. Austin Rd, Apt. B
Nantucket, IA 30301
johnl@nantucket.edu | 217-555-1212 (cell)

EDUCATION

B.S., Chemical & Biomolecular Engineering Expected May 2022
University of Nantucket, Nantucket, IA

- Advisor: Professor Nina R. Young
- GPA 3.55/4.00

EXPERIENCE

Research Assistant, Professor Nina R. Young Aug 2019-Present
University of Nantucket, Nantucket, IA

- Prepared and measured laminates for Li-ion battery electrodes
- Wrote programs for testing batteries using MACCOR

Teaching Assistant, Undergraduate Introductory Chemistry Lab Fall 2019
University of Nantucket, Nantucket, IA

- Planned and led help sessions and recitations to assist students with data collection
- Coordinated materials, conducted lab sessions, and graded lab reports for over 60 students

Summer Intern Summer 2019
ABC Engineering, New York, NY

- Conducted in-department reappraisal of a drilling joint-venture
- Developed an Excel-based steam optimization program
- Audited 7 completed energy projects

Tutor Spring 2019
University of Nantucket, Nantucket, IA

- Assisted in educating undergraduate students in Chemistry and Physics
- Held sessions to clarify difficult concepts taught in class and reviewed homework problems

COMPUTER EXPERIENCE

- Navigate Mac OS, DOS, MS Windows and UNIX
- Proficient in MathCAD, AmiProd, MatLab, Python

TECHNICAL SKILLS

- UV-Vis, IR, NMR Spectroscopy
- Gas, Liquid Chromatography
- Fractional distillation and recrystallization

AWARDS

- Dean's List Aug 2018-Jan 2020
- Grant recipient from the General Electric Foundation Summer 2019

EXTRACURRICULAR ACTIVITIES

- Member, Alpha Delta Chi Honor Society Jan 2019-Present
- Private Music Tutor (cello) Jan 2018-Present
- Volunteer, Urban Food Bank Fall 2018

EXAMPLE 2: Entry-Level BS Chemical Engineer

Jack Johnson

2013 Green Street, Apt. A, Urbana, IL 61801 | 319-555-1212 | jjohnson@illinois.edu

EDUCATION

BS, Chemical & Biomolecular Engineering, University of Illinois at Urbana-Champaign
Expected May 2021

- GPA 3.60/4.00
- Advisor: Professor J. P. Morgan

EXPERIENCE

Summer Intern, Exxon Research and Development, Houston TX
Summer 2020

- Developed solutions to over-pressure safety concerns for 12 hydrocarbon storage tanks and the distillate hydro-treater
- Estimated steam flow rates for a decontamination line replacement that could save \$800k during turnarounds
- Created a plan of action to improve operator safety through the re-routing of a steam drainage system

RESEARCH EXPERIENCE

Summer Researcher, University of Illinois at Urbana-Champaign
Summer 2019

- Constructed new experimental equipment parts
- Used Mathematica to model equipment efficiency

ACTIVITIES

Member, American Institute of Chemical Engineers
2018-present

Engineering Learning Assistant, University of Illinois at Urbana-Champaign
Fall 2019

- Led a class of 20 freshmen in a four-week discussion to introduce them to the engineering field
- Mentored students on importance of leadership, work experience, and academics

Member, Omega Chi Epsilon Engineering Honor Society
Fall 2018-Fall 2019

AWARDS

- James Scholar, 2019-present
- Illinois State Scholar, 2017-2018

SKILLS

Computer: ChemDraw, ChemDoodle, Aspen, Mathematica, MATLAB

Laboratory: NMR, Distillation, Column & Thin Layer Chromatography

Languages: Spanish (fluent), English (fluent), French (some knowledge)

EXAMPLE 3: Entry-Level PhD Chemical Engineer

ERNSTINE WILLIAMS

123 Gorder Drive
Iowa City IA 52240
ewilliams@illinois.edu
319-555-1212

EDUCATION

PhD, Chemical Engineering, University of Illinois, Urbana-Champaign, IL
Anticipated December 2022

- Thesis title: "Recovery and Purification of Recombinant Proteins"
- Advisor: Professor Anton Bruckner

MS, Chemical Engineering, University of Illinois, Urbana-Champaign, IL
May 2017

- Research Project: "Recovery and Purification of Recombinant Proteins"
- Advisor: Professor Anton Bruckner

BS, Chemistry, Central College, Pella, IA
May 2015

- GPA 3.91/4.00, *Summa Cum Laude*
- Thesis title: "Computer simulation of ozone reactions"
- Advisor: Professor J. P. Morgan.

RESEARCH EXPERIENCE

Graduate Research Assistant, University of Illinois, Urbana-Champaign, IL
Dec 2016 – Present

- Advisor: Professor Anton Bruckner
- Investigated clarification and purification methods to recover recombinant proteins
- Evaluated processes for upstream operations (i.e. size reduction, milling, extraction, and centrifugation) and downstream operations (chromatography, precipitation, filtration, and expanded bed adsorption)
- Established theoretical and applied guidelines for developing efficient processes for the purification of recombinant industrial, therapeutic, and pharmaceutical products

Summer Intern, BP Research and Development, Houston, TX
Summer 2016

- Performed protein structure determination studies including amplifying DNA
- Purified product and performed agarose gel electrophoresis
- Purified cardiac calsequestrin using hydrophobic interaction chromatography
- Extracted product from the gel for future structure analysis

- RESEARCH EXPERIENCE cont.'d** Summer Intern, University of Illinois at Urbana-Champaign
Summer 2014
- Worked independently in the lab of Professor Ivan P. Oakes
 - Designed and synthesized three molecular container variants for toxin remediation applications
- Undergraduate Research Assistant, Central College, Pella, IA
2012 – 2014
- Advisor: Professor J. P. Morgan
 - Constructed new experimental equipment parts
 - Used computer modeling to determine efficiency of equipment
- PUBLICATIONS** "Purification and Recovery of Recombinant Proteins for Pharmaceuticals"
Presented at Emmanuel Vasquez International Conference on Chemical Biology, Mexico City, Apr 2018.
- Williams, E. and Morgan, J.P. "Purex Pulse Studies – 1998," Modern Science, Spring 2017.
- PROJECTS** Production of Ethanol by Hydration of Ethylene over a Phosphoric Acid Catalyst
Jan 2017 – May 2017
- Designed the production process of ethanol by direct hydration of ethylene over a phosphoric acid catalyst using purge, recycle, and separation streams
- Evaluation of Hydronic Radiant Heating System Designs
Aug 2016 – Dec 2016
- Created specifications for a hydronic balancing-based heat distribution model
 - Employed life-cycle cost analysis to assess the relative cost-effectiveness of both an active and a natural gas heating system design
- AFFILIATIONS** American Institute of Chemical Engineers, 2015 – Present

List others in similar manner...

*Additional optional categories may include **ACTIVITIES** or **LEADERSHIP**, **COMMUNITY SERVICE**, **SKILLS**, **INDUSTRY EXPERIENCE**, or whatever experiences/skills you have that make you a unique and excellent candidate*

***References Page...** You may choose to set up a separate page of professional references (similar look to résumé; 3-5 references...could be a combination of academic & industrial supervisors)*

ACTION VERBS

Leadership & Organizational Skills

Achieved
Acquired
Acted
Adapted
Administered
Approved
Arranged
Ascertained
Assembled
Attained
Audited
Budgeted
Catalogued
Charged
Chartered
Completed
Complied
Conducted
Controlled
Decided
Delegated
Determined
Directed
Drove
Earned
Effected
Eliminated
Enhanced
Ensured
Exceeded
Excelled
Executed
Expanded
Guided
Headed
Hired
Implemented
Improved
Increased
Indexed
Instigated
Instituted
Inventoried
Kept
Led
Logged
Managed
Marketed
Motivated
Observed
Ordered
Organized
Overcame
Participated
Performed

Planned
Prepared
Presided
Procured
Projected
Provided
Ran
Recommended
Recorded
Recruited
Reorganized
Scanned
Scheduled
Strategized
Streamlined
Succeeded
Supervised
Supported
Unified
Won

Research Skills

Analyzed
Appraised
Classified
Coded
Collaborated
Collected
Compared
Constructed
Contrasted
Contributed
Coordinated
Designed
Detected
Diagnosed
Discovered
Dissected
Distributed
Engineered
Examined
Experimented
Explored
Extracted
Formulated
Innovated
Inquired
Inspected
Interpreted
Invented
Investigated
Made
Manipulated
Maximized
Minimized
Modeled
Modified
Monitored
Obtained
Oversaw
Pioneered
Produced
Proposed
Reported
Researched
Reviewed
Solved
Specialized
Stimulated
Studied
Summarized
Surveyed
Synthesized
Theorized
Transformed
Verified

Technical Skills

Applied
Assessed
Calculated
Computed
Correlated
Devised
Documented
Estimated
Financed
Handled
Integrated
Maintained
Operated
Programmed
Repaired

Creative Skills

Built
Conceived
Conceptualized
Created
Developed
Established
Fashioned
Founded
Generated
Initiated
Inspired
Launched
Originated
Piloted
Revised
Shaped
Symbolized
Tailored
Visualized

Teaching & Helping Skills

Advised
Advocated
Aided
Allocated
Approved
Assessed
Assisted
Attended
Cared
Checked
Clarified
Coached
Collaborated
Conducted
Cooperated
Counseled
Demonstrated
Developed
Diagnosed
Directed
Educated
Enabled
Encouraged
Evaluated
Examined
Explained
Facilitated
Followed
Fostered
Guided
Helped
Illustrated
Implemented
Influenced
Informed
Inspired
Instructed
Lectured
Led
Mentored
Planned
Prompted
Proposed
Represented
Reviewed
Served
Shaped
Solicited
Supported
Sustained
Taught
Trained
Tutored
United

Communication Skills

Addressed
Advertised
Answered
Arbitrated
Authored
Clarified
Communicated
Compiled
Composed
Consulted
Contacted
Corresponded
Critiqued
Debated
Delivered
Demonstrated
Drafted
Edited
Explained
Informed
Interviewed
Introduced
Mediated
Moderated
Narrated
Negotiated
Notified
Offered
Persuaded
Presented
Promoted
Proofread
Publicized
Published
Questioned
Referred
Related
Responded
Spoke
Translated
Wrote