

**Center for Engineering Career Development
U.Va. School of Engineering and Applied Science**

**RESUMES
Everything You Need to Know**

Purpose

A resume is a brief, concise document that presents, and effectively sells, your most relevant and positive credentials for employment, admission to graduate school, consideration for a scholarship or fellowship, or other professional purpose.

An employer will usually spend 15 to 20 seconds reviewing your resume, so the content of your resume must be clear, concise, and targeted to the type of job for which you are applying.

Preparation

One-page resumes are preferred for most entry-level positions. Two-page resumes are acceptable if the information on both pages demonstrates the skills and/or experience relevant to your profession. Resumes should highlight skills and accomplishments that meet employer qualifications, excluding irrelevant information and experiences. Well-designed resumes will be visually appealing and free from any spelling, typographical, punctuation, or grammatical errors. All resumes should be written concisely in an organized format that presents the most important information first.

Employers who read individual resumes spend very little time on each resume—in most cases, only twenty to thirty seconds. Many large employers are now using optical scanning machines and various software programs to assist them with this initial review.

If your resume has a typo or grammatical error, it will probably jump off the page to an employer, and this is a way to weed you out of a candidate pool. Your resume may be the only chance you get to make an impression, so make it a good one.

Constructing Your Resume

Categories of information you include on your resume should provide answers to these questions:

Contact information

Begin your resume with your name by capitalizing and using bold type.

- Include street address, city, state, and zip code.
- Include a phone number(s) where you can be reached
- Include your e-mail address

Career/Job Objective

The purpose of the objective statement is to inform the employer of your career goal and targeted interests. The statement should describe the focus of your job search. If your resume is broader, relay the most relevant objective in an accompanying cover letter. A good objective includes type and/or level of position, type and style of organization, and skills/qualifications.

A career/job objective is advantageous when:

- You want to specify your interests and where you would fit in the organization.
- You want to present the impression of a focused, self-confident person.

A career/job objective is not advantageous when it is:

- Too broad and meaningless, reflecting indecision.
- Too exclusive, eliminating you from jobs for which you might be considered.

Qualifications or Experience Summary

A summary of qualifications can condense an extensive background by emphasizing experiences and accomplishments in brief keyword phrases. The qualifications summary is accomplishment-oriented and provides an overview of your work experience. It can also serve to summarize relevant academic, volunteer and leadership experience for those who have limited work experience. A summary is most appropriate for someone with substantial experience, for someone who is changing careers and wants to demonstrate transferable skills, or for someone with a varied background.

Education

If your education relates to your objective and is within the past three years, it should be the first section. If not, education should follow the work experience section of your resume.

In reverse-chronological order, this section includes the schools you have attended, dates of graduation or dates of attendance, as well as degrees sought or completed. Other information that might be included: related coursework, scholarships and honors, percentage of college expenses earned by you, and special projects (e.g. research projects, teaching).

- Start with your most recent degree or the program in which you are currently enrolled. List other degrees or relevant education in reverse chronological order.
- Highlight your degree by using bold type or capital letters.
- If the degree is relevant to your job objective, begin with degree and emphasis, followed by university, location of university, and date of graduation or anticipated date of graduation.
- If degree/program is not directly related to current job objective, begin with the university, followed by the location, degree and emphasis, and graduation date.
- If you are within two semesters of graduation, do not use "expected" or "anticipated" with year of graduation.
- Should I include my GPA? If you are uncertain about including your GPA, ask a Career Services advisor for recommendations based on your individual circumstances.

Educational Highlights

This section is most effective when you have experiences from your education that are impressive and/or directly relate to your objective. Adding this section is useful when you have developed skills and specific knowledge through education and related activities rather than work experience. This section can be used to highlight coursework, research, study abroad experience, leadership and student activities that complements your objective.

- Consider listing relevant coursework under the appropriate degree.
- An alternative to highlighting courses is to list the skills and knowledge acquired through important courses and research. Example:
- You may want to describe thesis, research or design projects.

Employment Experience (Chronological)

- Begin with your current/most recent position and work backward, chronologically.
- Devote more space to recent employment.
- If your job titles relate to your current job objective, start each position description with job titles. If not, begin with the organization.
- Follow job title and organizational information with the organization's city and state.
- Use the first and last month and year to describe dates of employment.
- Describe the last three to five positions in detail. Summarize earlier positions unless relevant to your objective. Within each listed position, stress the major accomplishments and responsibilities that demonstrate your competency

Employment Experience (Functional)

- Use two to four sections to summarize each area of functional skill or expertise.
- Develop the functional skill headings based on the skills you want to market to employers and/or that are most related to your targeted objective.
- Describe your skills in short phrases and place under the appropriate functional skill categories.
- Rank the phrases within each category and place the most important skill or accomplishment first.
- Do not identify employers within functional skills sections.

- List a brief history of your actual work experience at the end of the section, giving job title, employer and dates. If you have had no work experience or a very spotty work record, leave out the employment section entirely or summarize the nature of your jobs without providing specific details. If you do this, be prepared to discuss your specific jobs in more detail at the job interview.
- Both chronological and functional resumes must be succinct, emphasizing your experience and accomplishments. Resumes are often your first introduction to the employer and dramatically impact the screening process. Invest the time to create an excellent marketing tool - your resume - to increase job opportunities and career advancement.

Types of Resumes

Information related to skills and experiences can be presented in a chronological format, a functional format, or a combination of the two. Each format has its advantages and disadvantages. To select the type that best supports your strategy, review the following descriptive information and resume samples.

Chronological Resume

In the chronological resume, job history is organized chronologically with the most recent job listed first. Job titles and employers are emphasized and duties and accomplishments are described in detail. A chronological resume is easy to read, and can highlight career growth. It is suited to those whose career goals are clearly defined and whose job objectives are aligned with their work history.

Functional Resume

In a functional resume, skills and accomplishments developed through work, academic, and community experiences are highlighted. Your skills and potential can be stressed and lack of experience or possible gaps in work history de-emphasized.

Resume Checklist

The following checklist has been designed to assist you in writing your resume. This checklist reflects the expertise of the Career Center staff developed through critiquing thousands of resumes, discussing selection criteria with numerous employers, and gathering input from a wide range of career professionals.

APPEARANCE

- Is it inviting and easy to read; not too much information uses appropriate font styles and font sizes (10-14 pts.)
- Incorporates enough white space between sections to facilitate skimming centers text; adequate margins creates visual impact using bullets, boldface, underlining, italics, and font sizes to emphasize key words (for scannable resumes, use boldface only)
- Printed on high quality (16-25 lb.) bond paper print is letter quality

ORGANIZATION AND FORMAT

- appropriate format includes keyword phrases of profession
- presents strongest qualifications first
- appropriate length: 1 page for every 6-10 years of work experience

WRITING STYLE

- begins sentences or phrases with powerful action verbs
- short paragraphs mostly under five lines; short sentences
- brief, succinct language; no unnecessary words
- absolutely free from grammatical, spelling, punctuation, usage, and typographical errors

CONTENT

Contact Information

- address, current and permanent (if necessary)
- telephone number(s) where you can be reached 9-5

Objective

(Optional for chronological resume. Required for functional resume.)

- briefly indicates the sort of position, title, and possible area of specialization sought
- for management or supervisory positions, indicates level of responsibility sought
- language is specific, employer centered not self-centered; avoids broad or vague statements

Summary of Skills, Accomplishments, or Expertise

- identifies 3-6 key achievements that support the objective
- summarizes relevant work experience and accomplishments that support the objective

Education and Training

- Highest level of attainment is listed first; work from most current degree backward degree in progress or most recently completed degree include type of degree, name of university, location of university, date of graduation or anticipated date list of other degrees, relevant higher education coursework, continuing professional education or training
- courses, and study abroad
- major, minor, or areas of concentration
- omit high school if you have completed more than two years of college unless referencing impressive honors or relevant extracurricular activities
- relevant courses, papers, projects; include paper or project titles
- GPA, honors, awards, scholarships
- percentage of educational expenses earned

Employment Experience And or Related Projects

- Include all paid, volunteer, intern, or cooperative education experiences that are relevant to your objective.
- Start with most recent experience if using chronological format.
- title held, organization name, city, state, or country location (if not U.S.A.)
- dates position held; if several positions for one employer, list employer once responsibilities listed in order of each item's relative value to the future employer; indicate transferable skills and adaptive abilities used on the job
- accomplishments on your job; what problems did you face? What solutions did you find?
- contributions to the organization, i.e., ways your work helped increase profit, membership publicity, funding, motivation, efficiency, productivity, quality; saved time or money; improved programs, management, communication, information flow etc.
- quantitative or qualitative indicators that describe the results of your contributions or accomplishments, i.e., "increased sales by \$50,000"; "reduced staff turnover by 25%"; "significantly improved staff ability to access
- data"
- learning that took place on the job that is relevant to your job objective (optional) describe accomplishments in jargon of the field

Skills

- computer skills: software applications, languages, hardware, operating systems
- language skills: specific level of fluency and ability to read and write as "basic," "intermediate," or "advanced"
- other

TECHNICAL SKILLS

- Techies may want to place the skills section after the job objective and before the "Experience" section. But there are exceptions. If you're just starting out, you may want to place a greater emphasis on education and internship and then consider placing the list below the experience section or adding other elements, such as communication abilities and foreign languages, to the skills section.
- Here are examples of one job seeker's technical skills section:

TECHNICAL SKILLS

Languages: Java, XML, C, C++, JavaScript, SQL, HTML, UML.

Tools: Borland JBuilder, Sun ONE Studio (Forte), Macromedia Dreamweaver MX, Rational Rose, UltraEdit-32, Borland CBuilder, Oracle SQL Plus.

Operating Systems: Windows (XP, 2000, NT), IBM OS/2 2.0, HP-UX 9.0, DEC VMS 4.1, Unix (Linux and Sun Solaris).

List Format -- Gives Employers a Quick Overview

TECHNICAL SKILLS

<i>Languages</i>	<i>Tools</i>	<i>Operating Systems</i>
Java	Borland JBuilder	Windows (XP, 2000, NT)
XML	Sun ONE Studio (Forte)	IBM OS/2 2.0
C	Macromedia Dreamweaver MX	HP-UX 9.0
C++	Rational Rose	DEC VMS 4.1
JavaScript	UltraEdit-32	Unix (Linux and Sun Solaris)
SQL	Borland CBuilder	
HTML	Oracle SQL Plus	
UML		

List Format with Years of Experience -- Shows Depth

TECHNICAL SKILLS

<i>Web Technologies</i>	Dreamweaver, JavaScript, HTML	1-3 years
<i>Languages</i>	Java, C, C++, UML	1-2 years

List Format with Years of Experience and Skill Level -- More Detail

An alternative is to denote only the years of experience.

TECHNICAL SKILLS

<i>Languages</i>	<i>Years' Experience</i>	<i>Skill Level</i>
Java	6	Expert
XML	3	Intermediate
C	6	Expert
C++	4	Intermediate
JavaScript	6	Expert
SQL	4	Intermediate
HTML	6	Intermediate
UML	2	Novice

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Extracurricular Activities, Community Service, Professional Associations

- list of significant positions of responsibility; include title, name of organization or team, dates leadership roles, achievements, and transferable skills that are relevant

Additional Resume Categories

To add relevant information to your resume that focuses on special knowledge or skills, consider the following resume headings:

RELATED PROJECTS

PROFESSIONAL AFFILIATIONS

TECHNICAL SKILLS

INTERNSHIP

EXPERIENCE ASSETS

ACCOMPLISHMENTS

COOPERATIVE EDUCATION

EDUCATIONAL HIGHLIGHTS

HONORS

TRAVEL

LEADERSHIP ACTIVITIES

SCHOLARSHIPS

LANGUAGES

INTERESTS

SKILLS

QUALIFICATIONS

SUMMARY PRESENTATIONS

PUBLICATIONS

REFERENCES

TRAINING

VOLUNTEER ACTIVITIES

Proofread, Proofread, Proofread!

Does your resume:

- Include only relevant information?
- Use action verbs?
- Stress skills and accomplishments over duties?
- Make qualifications evident?
- Include specific info: figures, dates, numbers?
- Support your purpose/objective?

Evaluate Appearance

- Attractive layout?
- Headings highlighted?
- White space?
- Style appropriate?
- Font size readable?
- Length appropriate?
- Important items stand out through spacing and/or highlighting?
- Consistent placement of information (e.g. dates)?

KEY PHRASES

Resume Phrases and Words

The following phrases and words may help with organizing your resume statements. They convey involvement and accomplishments and make your resume more readable and effective.

Interaction with...	Acted as liaison for/between...
Established..	Formulated...
Edited...	Handled...
Initiated...	Implemented...
Managed...	Assigned territory consisting of...
Maintained...	Promoted to/from...
Instrumental in...	Recipient of...
Remained as...	Innovation resulted in...
Honored as...	...amounting to a total savings of...
Recommendations accepted by...	Administered...
Adept at...	Analyzed/Assessed...
Assisted with...	Arranged...
Coordinated...	Counseled...
Delegated...	Conducted...
Directed...	Demonstrated...
Developed...	Advised...
Consulted..	Delivered...
Budgeted...	Drafted...
Evaluated...	Gathered...
Installed...	Improved...
Instructed...	Investigated...
Negotiated...	Organized...
Planned...	Performed...
Presented...	Recommended...
Proven track record in...	Experience involved/included...
More than [] years experience...	Expertise and demonstrated skills...
Successful in/at...	Experienced in all facets/phases...
Knowledge of/experienced as...	Extensive training/involvement...
Initially employed...	Specialize in...
Proficient/competent at...	Temporarily assigned to...
Sales quota accountability...	Reported directly to...
Served/Operated as...	In charge of...
Direct/Indirect control...	Familiar with...
Assigned to...	Contracted/Subcontracted...
Provided technical assistance...	Acted/Functioned as...
...on an ongoing/regular basis.....	to ensure maximum/optimum...
Worked closely with...	Resulted in...

Action Verbs By Skill Category Communicative

Tip: Circle all of the words relevant to your experiences, and then use them in your resume!

address	enlist	present
arbitrate	express	promote
arrange	follow-up	publicize
author	formulate	publish
brief	influence	question
communicate	inform	read
compose	interpret	reconcile
confront	interview	recruit
contact	lecture	refer
convince	market	report
correspond	mediate	rewrite
describe	meet	speak
develop	moderate	suggest
direct	motivate	summarize
document	negotiate	talk
draft	network	translate
edit	persuade	write

Creative

act	establish	pilot
broaden	execute	pioneer
compose	explore	plan
conceive	fashion	redesign
conceptualize	forge	rehearse remodel
conduct	found	renovate
create	illustrate	replace
design	imagine	revitalize
develop	improvise	shape
direct	institute	sketch
discover	integrate	spearhead
draft	introduce	start
dramatize	invent	stimulate
draw up	market	strategize
entertain	modernize	transform
	originate	
	perform	

Financial

account for	budget	market
adjust	calculate	monitor
administer	compute	plan
allocate	control	procure
analyze	develop	project
appraise	estimate	purchase
audit	finance	reconcile
balance	forecast	research
buy	manage	transfer

Helping

advise
advocated
aided
anticipated
assessed
assisted
care for
clarify
coach
counsel
demonstrate
diagnose
educate
enable

encourage
enlist
ensure
evaluate
expedite
facilitate
familiarize
forecast
foster
guide
handle
harmonize
moderate
observe

orient
predict
prescribe
protect
provide
reconcile
rectify
refer
rehabilitate
represent
serve
support
utilize
volunteer

Management

administer
account for
analyze
appoint
approve
assign
assume
attain
chair
choose
contract
consolidate
consult
decide
delegate
determine
develop
devote
direct

dispatch
dispense
employ
evaluate
execute
formulate
handle
head
hire
leverage
manage
maintain
orchestrate
order
organize
oversee
plan
perfect
preserve

prioritize
produce
propose
protect
realize
recommend
recruit
regulate
review
revitalize
reward
save
set goals
schedule
supervise
terminate
unify
withdraw

Organizational

approve
arrange
catalogue
classify
collaborate
collect
compile
conserve
consolidate
cut
diagram
dispatch
distribute
enlist
execute
expedite
extract
generate

identify
implement
inspect
integrate
interface with
join
list
log
monitor
operate
organize
pinpoint
prepare
prioritize
process
record
reshape
reorganize

retrieve
revamp
revise
schedule
screen
set up
shape
specialize
specify
streamline
stretch
substitute
systematize
tabulate
target
update
validate

Research

acquire
amplify
analyze
calculate
chart
clarify
collect
compare
conduct
critique
diagnose
design

determine
disprove
evaluate
examine
extract
formulate
identify
inspect
interpret
interview
investigate
locate

modify
organize
process
review
research
study
summarize
survey
systematize
test
trouble-shoot

Results

achieve
accelerate
accomplish
add
advance
attain
augment
award
complete
compound
contribute
decrease
double
effect
eliminate
enlarge
establish

exceed
excel
expand
extend
fortify
improve
increase
initiate
introduce
launch
lower costs
map
maximize
measure
obtain
pioneer
prove

reduce
re-establish
resolve
restore
selected as
stabilize
standardize
succeed
transform
trim
triple
validate
widen
won

Teaching

accept
adapt
advise
actively
analyzes
apply
appraise
assess
assign
attend
calm
categorize
challenge
choose
clarify
coach
command
communicate
compliment
consider
cooperate
coordinate
correct
define
demonstrate
designate
develop
direct
discipline
doubt

educate
elaborate
elicit
emphasize
enable
encourage
evaluate
excite
explain
explore
facilitate
focus
generate
guide
hypothesize
identify
implement
incorporate
indicate
infer
inform
initiate
inquire
instruct
interact
integrate
investigate
judge
listen
model

modify
motivate
observe
organize
persuade
ponder
postulate
praise
provoke
question
reinforce
rephrase
reward
set goals
set standards
simplify
solicit
speculate
state
stimulate
structure
synthesize
systematize
teach
tell
thank
theorize
train
tutor

Technical

activate
assemble
began
build
calculate
compute
construct
contrive
convert
deliver
design
detect
devise
display
engineer

exhibit
fabricate
install
maintain
navigate
operate
overhaul
participate
program
rehabilitate
remodel
repair
resolve
retrieve
screen

sell
service
solve
supply
train
upgrade

SHELLY JEFFERSON

sj@virginia.edu
1 Street, Vienna, VA 22205
743.600.4444

OBJECTIVE

To obtain a position which would utilize my highly valued problem solving and analytical abilities, excellent communication skills, proven leadership, mature decision making and highly effective team building skills.

EDUCATION

UNIVERSITY OF VIRGINIA, School of Engineering and Applied Science

Charlottesville, VA

ME in Systems Engineering, **GPA: 3.9**

August 2000 - May 2005

BS in Systems Engineering with Distinction, Focus in Management Systems, GPA: 3.9

Minor in Engineering Business

- Thesis – An Analysis of the Economic Impact of Decision Making by EPA's Superfund Program
- Best Paper Award – IEEE Systems and Information Engineering Design Symposium, April 2004
- Dean's List – Fall 2000, Spring 2002, Fall 2002, Spring 2003

EXPERIENCE

ABC CONSULTING

Vienna, VA

July 2005 -
present

Client – MLL, New York, NY

- Served as Communications Lead, supporting deployment planning and managing the day-to-day operations of the Program Management Office.
- Managed a team of three, responsible for project and portfolio management, change request management, issue/risk management, resource management, financial analysis, and executive, program, and end-user communications.

Client – CPP, San Francisco, CA

- Served as a Business Analyst Lead, managing the work products of three resources within the Enterprise Application Integration group for requirements elicitation, use case elaboration, and interface specification of two custom development projects.
- Completed cost and time estimations, managed issues, and tracked progress of analysis and development efforts.
- Sold over \$1.2M in add-on sales for work on the account including three resources for requirements gathering and technical design.

Client – Kodak, Rochester, NY

- Analyzed data for Magneto-optical crystals and statistical reliability modelling of optical Fibers.
- Evaluated million dollar problems affecting optical fiber connectors in communication systems.
- Recommended solutions on how to improve the quality of optical fiber connectors.
- Managed a team of four as Training Lead in developing customer support and finance related training documentation for a custom developed system. Facilitated and taught training sessions to clients. Provided on-going support to clients prior to launch.
- Served as a Business Analyst during the Inception and Elaboration phases of a digital media delivery project utilizing the Rational Unified Process, facilitating requirements gathering sessions and generating use cases.

Client – Gladstone, Atlanta, GA

- Served as a Business Analyst during the Inception phase of a billing system implementation, developing and validating current and future state process flows.
- Authored and executed system test cases, documented testing results, and communicated defect analysis reports to the development team and project sponsors.

CERTIFICATIONS AND AFFILIATIONS

- Certified Apprentice Engagement Manager, ABC Consulting
- Certified Level 1 Software Engineer, ABC Consulting
- Member, Omega Rho International Honor Society
- Member, Phi Eta Sigma, National Honor Society
- Member, National Society of Collegiate Scholars

May 2007 – present
December 2006 – present
August 2003 – present
August 2001 – present
August 2001 – present

LEADERSHIP

- Co-Chair, Herndon Community Service Team, ABC Consulting
- Editor in Chief, TME News to Peruse Newsletter, ABC Consulting

December 2006 – present
August 2006 – present

SKILLS

PROFICIENT IN MICROSOFT OFFICE AND MICROCAL ORIGIN

CHRISTOPHER CAVALIER

@virginia.edu

School Address:

Permanent Address

OBJECTIVE

To obtain a position within a related field of Electrical Engineering utilizing my strong analytical abilities and interest in the field.

EDUCATION

UNIVERSITY OF VIRGINIA, SCHOOL OF ENGINEERING AND APPLIED SCIENCE Charlottesville, VA
B.S Electrical Engineering, concentration in controls: *Cumulative GPA: 3.0 Major GPA: 3.4* May 2009
Related Coursework: Electronics, Computer Architecture, Power System Fundamentals, Electromagnetic Fields, Signals and Systems I & II, Linear Control Systems, Computer Networks, Electrical Engineering Projects

RELATED WORK EXPERIENCE

UVA CENTER FOR APPLIED BIOMECHANICS Charlottesville, VA
Project Assistant/Summer Intern, Summer 2007– May 2009
 > Researched magneto-rheological fluids and their effectiveness in high impact force dampers and decelerators.
 > Used research knowledge and principles taught in ECE classes to design an electromagnet to house and manipulate the MR fluid to intricate specifications

US NAVAL RESEARCH LAB, CENTER FOR SPACE TECHNOLOGY Washington D.C
Intern Winter 2008
 > Explored the lab; exposure to cutting edge research and development.
 > Worked with a team that established the longest free-space laser communication link over the Chesapeake Bay Detachment.

UVA AUTO SAFETY LABORATORY (*Bio-Impact Mechanics/Aerospace Engineering lab*), Charlottesville, VA
Project Assistant/Summer Intern, Summer 2006
 > Managed and aided in the modeling and conduction of the Fluid Percussion Brain Injury Project in relevance to non-lethal weapons/projectiles.
 > Modeled an impact interface using a high impact ultra low friction piston/cylinder for the projectile to the brain simulator.
 > Performed preliminary analysis of brain impact data.
 > Installed and configured project related computer hardware for testing and data collection

OTHER EXPERIENCE

- **Private Tutor**, French, Biology, and Mathematics (Algebra/Geometry/Calculus) 2005-present
- **Volunteer**, INOVA Mount Vernon Hospital 2005-2008
- **Volunteer**, Yoo's Martial Arts 2004-2008

TECHNICAL SKILLS

Highly skilled in Excel, MS Office applications; experienced in Java; familiar with Visio, Access, SQL, php, html

LEADERSHIP

UVa Mentoring – Executive Board, President, Founder, Currently initiating university-wide mentoring program for freshman. Responsible for piloting the program advertising, training mentors, and recruiting mentees.

Tau Beta Pi (Engineering Honor Society) – Executive Board, Social Chair

Engineering Mentoring, Act as a mentor for a younger student. Develop worksheet curriculum for goal setting and progress assessment.

Madison House Volunteering – Buford Middle School; Charlottesville, VA

Frank A. Ichel

9709 Rambling Ridge Court Fairfax Station, VA 22039 703-622-4669 FrankIchel@gmail.com

EDUCATION

University of Virginia, Charlottesville, VA

Bachelor of Science, Chemical Engineering
Rodman Scholar

Dec. 2008

- Thesis research and technical report analyzing hydrogen production energy efficiency
- Energy Outlook and Technical Options: Proposed energy outlook scenarios for 2030

Thomas Jefferson High School for Science and Technology

Student Government Class President (2000-2001), Academic Honors, Varsity Tennis Team

Alexandria, VA

2000–2004

WORK EXPERIENCE

ExxonMobil Research and Engineering Fairfax, VA

Process Engineering Division Intern, Distillation & Gas Processes Section

Summer 2007

- Created spray nozzle header design algorithm to optimize liquid distribution in fractionation towers to improve efficiency and reduce maintenance costs
- Constructed Excel tool to automate design algorithms to be used by process designers and software developer, to serve as foundation for proprietary design software (PEGASYS) distributed to EMRE engineers globally
- Analyzed experimental nozzle data, correlating drop-size distribution and pressure-drop to specify nozzle type
- Presented the tool to Distillation Section and incorporated user feedback
- Utilized tool to design spray nozzle headers for two columns in the Joliet Refinery
- Collaborated with software developer and project manager as a technical consultant during PEGASYS testing

ExxonMobil Research and Engineering

Projects Division Intern, Process Design Section

Fairfax, VA

Summer 2006

- Automated design of 3-Phase Separator Drums and Blowdown Drums in several Excel tools
- Specified Sour Water Stripper Feed Drum design in technical consultation with Chalmette Refinery
- Delivered validated Excel spreadsheet models to software developers to serve as foundation for PEGASYS

College Preparation Tutoring

Private SAT and High School Prep Services

Fairfax, VA

2003–2005

George Mason University – Krasnow Institute

Research Mentorship

Fairfax, VA

2003–2004

- Applied computational models of population dynamics to social science research (Complexity)

SKILLS / INTERESTS

Skills: AspenPlus, Laboratory Experience with H₂ Fuel Cell, Profitability Analysis
Very Proficient in Microsoft Excel, Microsoft Power-Point, and Microsoft Word

Interests: Energy Options and Environmental Sustainability, Ethics, Economics, Sports, Weight Lifting

UVA Poker Club

Co-Founder, Poker Tournament Director

2004–2006

- Organized and supervised ~50 entrants weekly in Wahoo's Series of Poker tournaments

UVA Green Dining

Student Activist

2008

- Led Sustainable Community Design Team in developing a recycling strategy to compost used take out boxes
- Aligned private interests and University Recycling to gain approval for On Grounds composting

DAVID DARDEN

100 Engineer's Way
P.O. Box 30000
Charlottesville, VA 22904

Home: 434-982-3131
Work: 434-924-2424
bbbb@virginia.edu

OBJECTIVE

Mechanical or product development engineering position working on designing and testing cardiac related medical devices.

SUMMARY OF QUALIFICATIONS

Graduate researcher with experience designing and prototyping cardiac assist devices. Proven ability to work well within cross-functional teams. A talent for creative and simple solutions to challenging engineering problems. Some specific skills include:

- Strong analytical and problem solving ability
- Able to create and work from engineering models and CAD drawings (SolidWorks, Catia, and PRO/E)
- Knowledge of manufacturing processes such as machining, casting, molding, etc.
- Excellent technical writing and documentation skills using the Microsoft suite

EDUCATION**Masters Degree in Mechanical and Aerospace Engineering**

University of Virginia, Charlottesville, VA (Expected May 08) GPA 3.8

- Thesis work focused on the mechanical design of a magnetically suspended, axial flow, artificial heart pump
- Designed a test rig to validate CFD model predictions and test the fluid components of a left ventricular assist device

Bachelor Degree in Mechanical Engineering Program

Brigham Young University, Provo, UT (Apr 06) GPA 3.6

- Solid background in mechanical design and analysis as well as sound understanding of basic electrical and civil engineering principles
- Courses completed in advanced CAD modeling, composites, materials science, machine design, and instrumentation

EXPERIENCE**University of Virginia, Mechanical and Aerospace Engineering Department**

Teaching Assistant (Jan 07-May 07)

- Developed a deep understanding of mechanics of materials
- Refined skills in communicating engineering concepts through teaching and tutoring

Brigham Young University, Physics Department

Physics Demo Area Assistant (Apr 03-Apr 06)

- Gained extensive hands on experience with modeling physical phenomenon from eddy current production to thin film interactions and more
- Designed and built multiple prototypes employing basic manufacturing techniques such as milling, turning, etc.

Team Lead (Senior Design Project, Sept 05-Apr 06)

- Strong leadership and organization skills developed
- Insight gained into carrying products from conception to production

DANIEL JEFFERSON, PH.D.Email: djeffersonn@virginia.edu

Office: Department of Biomedical Engineering, University of Virginia

(434) 924-4444

Residence: 4793 Wesley Chapel Road, Richmond, VA 22301

(804) 234-4231 cell

OBJECTIVE/SUMMARY OF QUALIFICATIONS

To obtain a research scientist position that utilizes cell biology approaches to engineering design with an emphasis on musculoskeletal tissue interaction with biomaterials.

- Expert at fabrication and characterization of biomaterial structures
- Skilled in cell biology techniques
- Knowledge of procedures related to filing patents

EDUCATION

UNIVERSITY OF VIRGINIA, DEPARTMENT OF BIOMEDICAL ENGINEERING Charlottesville, VA

Doctor of Philosophy in Biomedical Engineering 2008**Dissertation Title:** Sintered Poly[bis(amino acid ester)phosphazene] Microspheres Imbued with Poly(L-lactide) Nanofibers: Biomimetic Scaffolds for Bone Tissue Engineering

UNIVERSITY OF OKLAHOMA, DEPARTMENT OF CHEMICAL AND MATERIALS ENGINEERING, Norman, OK

Bachelor of Science in Chemical Engineering with special distinction 2003**FELLOWSHIPS AWARDED**

UNIVERSITY OF VIRGINIA, DEPARTMENT OF BIOMEDICAL ENGINEERING Charlottesville, VA

NIAMS, NIH Sponsored NRSA T32 Training Fellowship 2009**PRACTICAL EXPERIENCE**

UNIVERSITY OF VIRGINIA, DEPARTMENT OF BIOMEDICAL ENGINEERING Charlottesville, VA

Postdoctoral Fellow 2009

- Construct model substrates from poly(methyl methacrylate)
- Investigate how focal adhesion assembly is affected by the physical properties of a substrate
- Investigate how signaling cascades are affected by the physical properties of a substrate
- Monitor how cell migration is affected by the physical properties of a substrate

UNIVERSITY OF VIRGINIA, DEPARTMENT OF BIOMEDICAL ENGINEERING Charlottesville, VA

Graduate Research Assistant 2003 - 2008

- Synthesize polyphosphazenes
- Fabricate composite nanofiber/microsphere scaffolds
- Characterize physicochemical properties of scaffolds and polyphosphazenes
- Assay osteoblast phenotype progression
- Assay osteoblast transcription factor activity

PATENTS

1. **Brown JL**, Nair LS and Laurencin CT. Solvent/Non-Solvent Sintering Technique for Creating Sintered Microsphere Scaffolds. US Provisional Patent Application Serial No. 60/940,549.
2. **Brown JL**, Deng M and Laurencin CT. Smart Nanosphere Capable of Targeted Cancer Cell Destruction. US Provisional Patent Application Serial No. 60/918,105.

PUBLICATIONS

1. **Brown JL**, Peach MS, Nair LS, Kumbar SG and Laurencin CT. Composite nanofiber/microsphere scaffolds: bridging nanoscale and microscale architectures to improve bioactivity of mechanically competent constructs. Under Review with Nature Materials

PUBLICATIONS, continued

2. Deng M, Nair LS, Nukavarapu SP, Kumbar SG, **Brown JL**, Krogman NR, Allcock HR and Laurencin CT. Biomimetic, Bioactive Etheric Polyphosphazene-Poly(lactide-*co*-glycolide) Blends for Bone Tissue Engineering. *J Biomed Mater Res Pt A*. 2009 Jan; Online.
3. Nukavarapu SP, Kumbar SG, **Brown JL**, Krogman NR, Nair LS, Allcock HR and Laurencin CT. Polyphosphazene/Nano-Hydroxyapatite Composite Microsphere Scaffolds for Bone Tissue Engineering. *Biomacromolecules*. 2008 Jun; 9 (7): 1818-1825.
4. **Brown JL**, Nair LS and Laurencin CT. Solvent/Non-Solvent Sintering: A Novel Route to Create Porous Microsphere Scaffolds For Tissue Regeneration. *J Biomed Mater Res Pt B*. 2008 Aug; 86B (2): 396-406.
5. **Brown JL**, Nair LS, Bender J, Allcock HR and Laurencin CT. The formation of an apatite coating on carboxylated polyphosphazenes *via* a biomimetic process. *Mater Lett*. 2007 Jul; 61 (17): 3692-3695.

PRESENTATIONS

1. **Brown JL**, Nair LS and Laurencin CT. Biomimetic Composite Scaffolds for Bone Tissue Engineering. 3rd Musculoskeletal Regeneration Symposium, Charlottesville, (2009).
2. **Brown JL**, Nair LS and Laurencin CT. Composite Microsphere/Nanofiber Scaffolds for Bone Tissue Engineering. World Biomaterials Conference, Amsterdam, (2008).
3. **Brown JL** and Laurencin CT. Poly[(amino acid ester)phosphazene] Sintered Microsphere Matrices: A New Direction in Bone Tissue Engineering. "Brown-bag" Bioresearch Seminar, Norman, (2007).
4. **Brown JL** and Laurencin CT. Polyphosphazene Microsphere Scaffolds: A New Direction in Bone Tissue Engineering. 1st Musculoskeletal Regeneration Symposium, Charlottesville, (2007).
5. **Brown JL**, Meng D and Laurencin CT. Smart Nanospheres for Targeted Cancer Cell Destruction: The Cure for Cancer. Nanonex 2007, Oak Ridge, (2007).
6. **Brown JL** and Laurencin CT. Solvent/Non-Solvent Slurry Sintering Technique for Preparing Microsphere Scaffolds. BMES, Charlottesville, (2006).

POSTERS

1. **Brown JL**, Nair LS and Laurencin CT. Novel Biodegradable Polyphosphazene Lighter than Water Microsphere Scaffolds for Bioreactor Based Bone Tissue Engineering. Society for Biomaterials 2007, Chicago, (2007).
2. Nukavarapu SP, Krogman NR, Kumbar SG, **Brown JL**, Nair LS, Allcock HR and Laurencin CT. Novel Composite Polyphosphazene Hydroxyapatite Scaffolds for Bone Tissue Engineering. Society for Biomaterials 2007, Chicago, (2007).

JOURNAL REVIEWS

- Artificial Organs
- Journal of Biomedical Materials Research: Part B. – Applied Biomaterials

COMMUNITY INVOLVEMENT

- Fluvanna County Officer of Election

REFERENCES

Available upon request

(Many thanks to the students and alumni who shared their resumes for this handout)

Your Resume Career Objectives

Why list your objectives?

Does your resume speak for itself? Is it clear from your work experiences what you want to be doing in your job or internship? If you are just graduating or looking to make a career change, the answer is probably no, which is why you want an objective on your resume. Let the employer know what you want. Your objective should be as specific as possible so the employer clearly understands what you are looking for. If you are uncertain of what you are looking for, it is best to keep an objective off of your resume rather than creating a generic, vague objective.

Sample Objectives:

- Professional position using teamwork, chemistry knowledge, computer skills, and creative thinking to solve problems related to chemical engineering.
- To secure a challenging position that utilizes my engineering education and interests in the fields of technical business and consulting.
- To apply information technology skills to contribute to the success of a leading edge organization.
- To obtain a challenging position in the field of Systems Engineering as well as a knowledge of management and organizational methods.
- Seeking a position as a software engineer, circuit design engineer, or application developer.
- A position within the computer science discipline, preferably concentrating on network analysis or design.
- Seeking a position in the electrical engineering or computer science industry with special interest in communications, networking, digital signals, and microelectronics.
- To gain employment involving the design, development, or testing of technologies in the fields of aerospace and mechanical engineering.
- Position in information technology, network development, or a field related to aerospace/mechanical engineering.
- Position in consulting industry, focusing on e-commerce, internet strategy, and information technology.
- Utilize my civil engineering education and technical skills in a project management position for a construction firm.
- To obtain a summer position related to transportation engineering, focusing on traffic analysis or highway design.
- To gain experience in chemical engineering involving applications of engineering principles such as mass and energy balance, thermodynamics, fluid dynamics, heat transfer, and chemistry with possible exposure to labs and pilot plants.
- A position in consulting with a specialization in computer information systems.
- To gain hands-on experience through an internship in an information technology or information systems division.
- Summer position in computer industry focusing on programming or software development.
- To obtain a summer internship within the field of civil engineering in order to gain hands-on experience while utilizing my academic background and advancing my interest in structural mechanics.
- To obtain a summer position in mechanical engineering focusing on machine design and structural engineering.
- Position in civil engineering specializing in structural or transportation engineering.

REFERENCES FOR

(YOUR NAME)

NAME
TITLE AND RELATIONSHIP TO YOU
ADDRESS
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