

# Lesson 2: Resumes

ENCP6000: Career Management for  
Engineers

NORTHEASTERN  
•  
1898

# Learning Objectives

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- Write a resume that is both grammatically correct and markets your skill sets



# What Do Employers Expect

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- Academic Proficiency
  - You can read, write, and speak English and do basic math
  - Speak Up, Slow Down
- Occupational Knowledge
  - If you say you can program in JAVA, you can actually program in JAVA.
- Social Skills
  - You play well with others, exhibit team skills and show respect, and are engaged in your work and your team.
- Character Traits
  - You do not lie, cheat or steal. You can pass a drug test
  - You are punctual, meet deadlines, and are responsible. You are "low maintenance."



**Your resume is the first step in communicating this to employers**

# From a Google recruiter:

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"As a recruiter I spend the first 30 seconds looking for school, degree, graduation date, and experience."

"I spend 30 sec to 3 minutes on a resume."

"If you have spelling mistakes, your resume isn't going to make it very far."

"If I don't see those items easily, I don't move forward with your resume."

"A really long resume doesn't work in your favor. 1 page for 10 years of experience is the common rule of thumb."



# Resume Basics

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Keep it neat,  
concise and  
appealing

1 page!

Recent, relevant and  
distinguishable!

Easy to  
follow

No grammatical  
errors or typos

# Components of a Resume

## • Required Sections:

- Name & Contact Information
- Education
- Skills & Certifications
- Experience

## • Optional Sections:

- Summary/Objective
- Volunteer experience
- GPA, if over 3.5
- Relevant course work
- Cover letter

<b>Jane Smith</b> Boston MA   (123) 456-7890   <a href="http://www.linkedin.com/in/janeQSmithwick">www.linkedin.com/in/janeQSmithwick</a>   <a href="mailto:smith.jq@husky.neu.edu">smith.jq@husky.neu.edu</a>	
<b>EDUCATION</b>	
<i>Master of Science in Information Systems, Northeastern University</i>	<i>May 2020</i>
Courses: Data Management and Database Design, Data Science Engineering Methods and Tools, Web Design and User Experience, Application Engineering and Development	
<i>Bachelor of Engineering in Computer Science, JSS Science and Technology University, India</i>	<i>May 2015</i>
Courses: Data Structures, Operating Systems, Analysis and Design of Algorithms	
<b>SKILLS</b>	
<i>Technical:</i> Java, Python, JavaScript (Type Script, RxJS), AngularJS, NodeJS, HTML, CSS, SQL (MySQL, Oracle, SQL Server), No SQL (MongoDB), Teradata, Hive, Git	
<i>Software:</i> Tableau, Qlikview, Informatica, Android Studio, JIRA, NetBeans, IntelliJ, Business Objects	
<i>Others:</i> Teamwork, Data Analysis, Problem Solving, Agile Methodologies	
<b>EXPERIENCE</b>	
<i>Associate Software Developer at Travelocity, Inc - Bangalore, India</i>	<i>Jan 2016 – May 2018</i>
<ul style="list-style-type: none"><li>• Designed a Funnel process for Hotel Transactions on Hive and also built a dashboard on Tableau</li><li>• Formulated a POC and developed first Universe for BO on Hadoop in the team, adopted by others later</li><li>• Organized team's reporting stack spread across three reporting tools (Tableau, Qlikview, Business Objects)</li><li>• Improved customer targeted analysis for marketing team by building a process using history data and purchases to help improve customer experience by sending campaigns and offers</li></ul>	
<i>Software Developer at Orbitz India - Bangalore, India</i>	<i>June 2015 – Dec 2015</i>
<ul style="list-style-type: none"><li>• Implemented a word-cloud in R for user review project, to understand more about experience during travel or stay</li><li>• Completed migration of databases and tables from DB2 database to Teradata</li></ul>	
<b>ACADEMIC PROJECTS</b>	
<i>Oscar Winner Predictions</i>	<i>Jan 2019 - Apr 2019</i>
<ul style="list-style-type: none"><li>• Performed exploratory data analysis to identify patterns in visualizations using matplotlib and seaborn</li><li>• Implemented models using Logistic Regression, Random Forest and Bayesian to interpret patterns and predict Oscar winners</li><li>• Modeled all factors that influence how an Oscar is chosen for various categories using scikit-learn</li></ul>	
<i>Medical Diagnostic Application</i>	<i>Sept 2018 - Dec 2018</i>
<ul style="list-style-type: none"><li>• Developed a Java swing application on DB4 to keep track of the documents of ongoing patient's medical records and track their history as well</li><li>• Established a cross organizational functionality where a doctor from one organization could ask second opinion from doctor from another without any delay by only selecting options he wants opinion on through the application</li></ul>	
<i>Hospital Database Management System</i>	<i>Sept 2018 - Dec 2018</i>
<ul style="list-style-type: none"><li>• Created a database in MySQL for Hospital that allows staff to store data related to patient like appointment number, bills etc</li><li>• Achieved more efficiency in retrieving data in an easier way saving time in finding required information in the pile of paperwork and also to manipulate these details meaningfully</li></ul>	



# Name & Contact Information

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- Full Name - but keep it simple; use first and last names only.
  - **Simple**: Jessica K Fisher
  - **Not Simple**: Jessica Elizabeth Karin Suzanne Fisher
- Local Address – city and state is enough
  - **YES**: Boston, MA
  - **NO**: Boston, USA or Boston, MA USA – **NEVER use USA**
- Phone Number(s)
  - No country codes (+1)
  - Professional phone message is a must
  - no ringback tones!!!
  - <https://youtu.be/GBfBNrqjUs> (1:05)



# Name & Contact Information

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- **Email address**
  - School email for co-op is important!!!
  - Use a personal email for your full-time search
  - Must be a professional address – not [supersexybabylove@yahoo.com](mailto:supersexybabylove@yahoo.com)  
(this was shockingly a real address a former student used on their resume – Yikes!!)
- **YES:** Any other appropriate means of contact (LinkedIn, github, your website)
- **NO:** personal information (marital status, age, etc.)





# Personal Contact Information

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- **String Format**

**Sally Smith**

Boston, MA | 617.987.6543 | [s.smith@northeastern.edu](mailto:s.smith@northeastern.edu)

[Linkedin.com/in/sallysmith18](https://www.linkedin.com/in/sallysmith18) | Github

- **Block Format**

**Sachin Shah**

Boston, MA

617-123-4537

[jdoe@northeastern.edu](mailto:jdoe@northeastern.edu)

[Linkedin.com/in/johndoe](https://www.linkedin.com/in/johndoe)

Github



# **The Summary Statement: ... Should you have one? It's up to you!**

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## **But consider:**

- **May be the only place an employer can see what you want to do**
  - Quick view of your background and career interests
  - Explain a change in focus, i.e. pediatric medicine to software developer
- **Short section, just below contact information**
  - Narrative (third party) not bullets
  - Focus on what you have done
  - State your professional interest if it is not otherwise clear from your resume
- **May be omitted if everything on your resume is clear and consistent**



# **A Good Summary Statement Helps Answers These Questions...**

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**What is your  
professional  
identity?**

**What are your  
main  
qualifications?**

**Why should they  
hire you?**



**How do you fit  
the position  
applying for?**

# Summary Statement Examples (narrative)

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## Example 1

Front-end web developer with years of experience in a fast-growing technological environment. Proficient in front-end web tools and a passion for technology and ability to solve business problems.

## Example 2

Software engineer with 7+ years of experience in SAP development and maintenance projects in mining and public-sector clients. Possessing good understanding of software development life cycle and IT infrastructure. Quick learner, confident, result oriented, and a team player seeking a development role to utilize my technical and interpersonal skills.

**\*\*\*NEVER write: Seeking a co-op\*\*\***



# Education Section

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- **Colleges/universities graduated from and the degrees earned**
- **List degrees – highest first**
  - Northeastern University - Show date of anticipated graduation
    - Expected May 2025
  - Only include other colleges that you graduated from
    - Correct university name and degree

**No schools below undergraduate!**



# Education / Honors

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- Start with **Northeastern University, Boston, MA**
- Degree and Program – fully spell it out
  - Master of Science in Information Systems
- GPA (greater than a 3.5)
- Relevant Coursework
  - List only courses that are relevant to your career
- Honors/Awards (Dean's List, Honor Societies)
  - Relevant, recent, distinguishable
- Certifications – AWS, Certified Scrum Master, Oracle, etc.
  - Relevant, recent, distinguishable



# Education Section Examples

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## **Northeastern University, Boston, MA**

*Master of Science in Telecommunication Networks*      *Expected May 2024*

- Relevant Courses: Embedded Systems, Internet of Things, Advanced Java Programming, Project Management

## **Mumbai University, Mumbai, MH, India**

Bachelor of Engineering in Electronics and  
Communication Engineering

June 2022

## **Rose Hulman University, Terre Haute, IN**

Bachelor of Science in Mechanical Engineering  
Honors: Tau Beta Pi, Graduated Magnum Cum Laude

June 2018



# Certificates vs. Certifications

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- **There is a difference between a “Certificate” and a “Certification”**
- **Certificates are given for completing a course, workshop, doing a good job, completing a training session.**
  - Getting a certificate does not mean you are certified
- **Professional certification, trade certification, or professional designation, often called “certification” or “qualification”, is a designation earned by a person that assures qualification to perform a job or task.**





# Technical Skills

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- **Provides a quick and comprehensive overview of your key skills, competencies, and strengths**
  - ONLY list skills and expertise you actually have!
- **Follows the Education section unless you have a summary then it follows the summary**
- **List relevant, field specific skills**
- **Shows your transferable skills using industry “terms”**
  - To find relevant words ... review your coursework and ...
  - Look at LinkedIn profiles and groups related to your field
  - Review job titles and job descriptions within your field



# Two Types of Skills Employers Look For

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## Soft Skills

- Integrity
- Dependability
- Effective communication
- Open-mindedness
- Teamwork
- Creativity
- Problem-solving
- Critical thinking
- Adaptability
- Organization
- Willingness to learn
- Empathy

## Hard Skills

- Bilingual or multilingual
- Database management
- Adobe software suite
- Network security
- SEO/SEM marketing
- Statistical analysis
- Data mining
- Mobile development
- User interface design
- Marketing campaign management
- Storage systems and management
- Programming languages (such as Perl, Python, Java, and Ruby)



# 3 Technical Skills Examples

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Technical skills: *Python, Java, C++, Angular*

**OR**

## Technical skills

**Programming languages:** Java, C#, C++

**Operating Systems:** Linux, Unix, Windows Server, Windows XP

**Web Technologies:** HTML, CSS, JavaScript, jquery, PHP

**Database:** MySQL, Oracle 9i, 10g, 11g

**OR**

## TECHNICAL SKILLS

**Programming:** SAP ABAP, SAP HR ABAP, SAP HCM, Java, Python, HTML, CSS, ASP.NET

**ABAP objects:** RICEF, ALE/IDOCs, BADI, SPAU/SPDD, PROXY, Webdynpro, BRF+

**Database:** MySQL, MS SQL server, Oracle 10g, PostgreSQL, MongoDB, SAP HANA

**Software/Tool:** SAP ECC 6.0, SAP SuccessFactors, Solman, Talend, Alteryx, SSIS, PowerBI, Tableau

**Certifications:** ITIL Version 3 (EXIN)

**Training:** SAP SuccessFactors Employee Central and Performance Management/Goal Management



# Experience

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- **List jobs in reverse chronological order - most recent first**
- **List the name of the company and location**
  - Brief description about each company is optional and only if explanation is needed
- **Use a consistent format for each position and dates**
- **Include the dates, titles, and locations for each position**
- **Describe relevant achievements and accomplishments**
  - **what you did!**
  - List the most important accomplishments first
  - **Use numbers to highlight accomplishments**
    - E.g., money, time, amounts, local-regional-global, etc.



# Accomplishment Statements (bullets)

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- **Something you did to help the employer and has measurable results.**
- **Not just a list of tasks, duties or skills; not a job description.**
- **Use a variety of action words to describe experiences.**
- **Action Verb + (What/How) + Results**
  - Start with a good action verb – **Bloom's Taxonomy is very helpful for mixing up your verb choices**
  - State specifically what you did and how you did it, including industry relevant skills or tools.
  - **State the benefits of your actions. If possible, quantify the results.**



## Action Verbs

### COMMUNICATIONS

acted as liaison	corresponded	instructed	negotiated	referred
advised	counseled	interpreted	notified	sold
advocated	demonstrated	interviewed	presented	trained
arbitrated	displayed	lectured	promoted	translated
authored	edited	marketed	publicized	wrote
commented	guided	mediated	published	recommended
consulted	informed	moderated		

### ADMINISTRATION

administered	determined	implemented	ordered	regulated
appointed	directed	initiated	organized	represented
arranged	dispatched	instituted	overhauled	revamped
completed	dispensed	issued	oversaw	reviewed
conducted	distributed	launched	prescribed	routed
consolidated	eliminated	led	presided	supervised
contracted	executed	managed	provided	supplied
controlled	founded	motivated	recruited	terminated
contributed	governed	obtained	rectified	
delegated	headed	offered	referred	

### PLANNING & DEVELOPMENT

broadened	developed	drafted	initiated	planned
created	devised	estimated	invented	prepared
designed	discovered	improved	modified	produced
				proposed

### ANALYSIS

amplified	computed	evaluated	identified	solved
analyzed	detected	examined	investigated	studied
calculated	diagnosed	forecasted	programmed	systemized
compiled	differentiated	formulated	researched	tested

### FINANCIAL/RECORDS MANAGEMENT

audited	collected	invested	minimized	recorded
allocated	condensed	inventoried	monitored	scheduled
balanced	documented	listed	processed	tallied
catalogued	expedited	logged	procured	traced
charted	guaranteed	maximized	purchased	updated
classified				

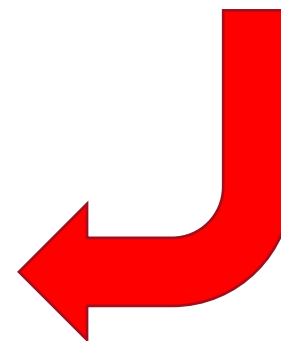
### MANUAL

assembled	delivered	modernized	repaired	rewired
built	installed	navigated	replaced	trimmed
constructed	maintained	operated	restored	

### GENERAL

accomplished	contributed	increased	provided	strengthened
achieved	delivered	initiated	served	transformed
expanded	originated	served	performed	completed

Use one of these  
to keep your  
resume  
distinguishable  
and fresh



You can find this  
in the Resources  
module in Canvas



# Examples of Accomplishment Statements

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## Software Developer

- **Developed** and tested back-end code in Java replacing previous implementation and resulting in 20% improvement in transaction response times

## Data Scientist

- **Designed** an inbound SPROXY interface for finance journal documents which eliminated complete manual intervention and resulted in saving of 4hrs/man day

## Network Engineer

- **Configured** 400 node satellite office network
- **Ran** three performance analysis assessments
- **Tuned** the network achieving 18% performance improvement on benchmarks

**NOTE: There are NO periods (full-stop)  
at the end of the bullet points**



# Academic Projects

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- Need to be significant if a substitute for experience, not a homework assignment
- A **case study** or homework is valuable but is not distinguishable and normally does not go on a resume.
- An engineering **project** could be defined as a collaborative enterprise, involving research or design, that is carefully planned to achieve a particular aim. An academic project usually lasts an entire term or academic year. Typically, these are either self-motivated, part of a graduation requirement, an independent study, or a capstone course.





# Academic Projects

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- Identify the project by name and include context (Senior Thesis, Capstone Project, Course XYZ semester project, etc.)
- Include bullets that emphasize and show measurable achievement of what you did, not what the project was about.
- The bullets should highlight the following:
  - The **scope** of goal of the project
  - The **skills and abilities** you applied.
  - The project **results** (what did you accomplish?)
  - Written just like experience!
- Graduate Student Resumes: Highlighting an Academic Project



# Academic Project (example)

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Northeastern University, Boston MA

June 2022

## ***HDR Quality Metric Review and Development*** (Senior Project)

- Led a three-person research team to establish scope, terms of reference, timeline and budget considerations with supervisor and Industry Representatives from Awesome Company
- Applied programming competency in C++ and MATLAB in addition to efficient hardware calibration skills to test and evaluate published video quality metrics
- Designed and implemented an algorithm that accurately estimates quality of high dynamic range, exceeding Industry Representative's expectations and earning an A+ for the project
- Results are under review by Supervisor for publication in Computers and Electrical Engineering

**\*\*NOTE: This section should look like your experience section**



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# Sample Resumes



# Resume Format

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- Start with a blank document with 1" margins; adjust as needed; do not use editing formats
- Type in your information and then format it
- Times New Roman or Arial font is best
- Font sizes no bigger than 12 and no smaller than 10
- Be ready to adjust as items are added

**Using formatting or inserting tables will make your document difficult to modify later so avoid these!!**



# Formatting Q & A

## \*Consistency is Key\*

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- How long should my resume be? → 1 page per 10 years of experience
- How many bullet points per job? → 3-5 (more for more relevant experience)
- How should I order my resume? → Reverse chronological order
- Should I use my photo? → Never!
- Should I use colors and design formatting? → It depends on the job and the industry
- What verb tense should I use? → Present tense for current employment & past tense for past employment
- Are typos or errors ok? → No! Never! Nada! Nope!
- Should I include references? → You will be asked for them separately



# Resume Checklist

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- Has the correct sections
- Consistency, alignment, spelling, grammar
- Contact information is accurate, complete, and clear
- Has a concise summary that shows experience and the value you can bring to a company
- Skills are present - easy to read and understand
- Education
- Experience
  - Work experience first; the largest section; most recent first
  - Academic projects if they add value and skills to the story
- Certifications and publications only if relevant

**Use the Resume Checklist in Canvas (Resources Module)  
to make sure you are on point!**



# Before You Apply for that Job...

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- Look at the job description and your resume: do your listed skills fit the requirements?
- Assess your soft skills: do you possess the requirements mentioned in the posting?



# Required, Desired, & Preferred

## What's the difference?

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### ***Required skills:***

- Also called "minimum qualifications"
- Meet 100% these standards to be considered for the position

### ***Desired skills:***

- The “nice to have” skills that make up a recruiter's wish list
- Least critical, and proficiency in these areas will give your application a nice boost
- Recommend taking the chance and apply

### ***Preferred skills:***

- Abilities employers want to see in a potential new hire, but they may not be deal-breakers when it comes to landing an interview
- If you have at least half of the preferred skills listed in the job description, don't think twice. Apply for the job!





# Preferred Skills

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- **Analyze**
- Circle any competencies that are repeated multiple times throughout the job description, as well as those that are described as "highly desired" or "strongly preferred."
- Hopefully, you already have some experience with the circled skills, even if only in passing.
- If you are inexperienced in any of them, you could consider an online course to demonstrate basic knowledge and a willingness to continue learning while employed.



# Tailoring Resumes

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- Reorder the keywords
- Rearrange your bullet points
- Revise your Summary (if you have one)
  - Dig through the job description to learn the critical aspects of the job

## Helpful Hint

Have a master resume with everything on it and then pick and choose, reorder and rearrange as needed for each position you apply to.



# RESUME PEER REVIEW WORKSHOP

## Work in Groups

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- Using the resume checklist evaluate each person's resume
- Start with one group member's resume
  - Review individually and make a few notes about the resume
- As a team, provide verbal feedback to the group member
  - Where can it be improved, clarified?
  - What can be added, removed, changed?
  - Resume owner take notes on suggested improvements
- Move on to the next group member's resume



# Resume Basics

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Keep it neat,  
concise and  
appealing

1 page!

Recent, relevant and  
distinguishable!

Easy to  
follow

No grammatical  
errors or typos

# Assignments

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See Canvas and your Syllabus for assignments, instructions, due dates and times.

