

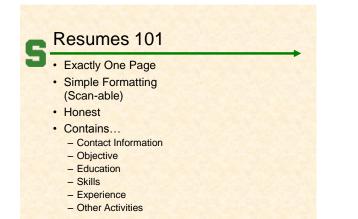
## Resume Challenges

#### Competition

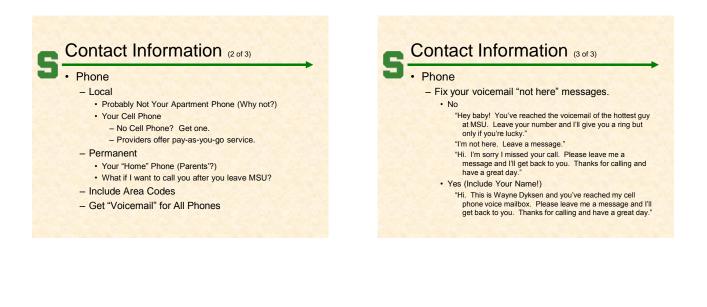
- 100's or 1,000's of 10,000's of Resumes
- Lots Similar
- Lots Qualified
- Typical Usage
  - Visual Scan (< 10 Seconds)
  - Optical (Machine) Scan
  - Often Not "Read" in Detail
  - Often Discarded
- How will your resume stand out?

## Resume Nota Bene

- Every Last Detail Matters
- If...
  - ...cannot find relevant information in 10 seconds
  - ...email wrong and bounces back
  - ...phone number wrong
  - ...not visually appealing
  - ...not professional looking
  - ...no answer and no voicemail
  - ...etc...
  - then...
  - ...pitch your resume and move on to the next one.







School Address Calvin College Grand Rapids, MI 49546 (616) 555-1234

Objective

Bob Dyksen

To secure a full time position as a software engineer that utilizes my skills and expands my knowledge in computer science.

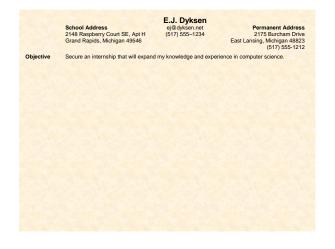


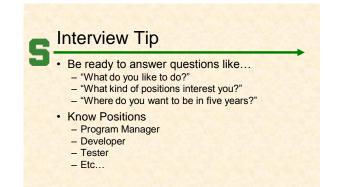
- Very Concise (One Line)
- · Indicate internship or permanent employment.
- Avoid flowery BS.
- Examples

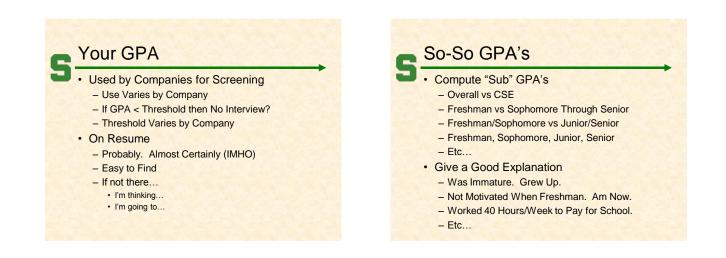
Prof. Wayne Dyksen

- To secure a summer internship as a software developer.
- To secure permanent employment as a software engineer.
- To secure permanent employment as a software engineer that utilizes and expands my skills in computer science.
- Be specific only if you really mean it. Why?
   To secure permanent employment as a database administrator
  - To secure permanent employment as a network administrator.

Permanent Address 2175 Burcham Dr. East Lansing, MI 48823 (517) 555-1212







Education		Cognate
Degree     Major     Cognate (Minor)     Date Expected     Institution     GPA     Cumulative     CSE     Relevant Courses     Number     Title     Topics in Parentheses     Non-MSU Institutions     May Include Other Colleges//	BS Computer Science Business May 2009 Michigan State University 3.50/4.0 3.70/4.0 CSE 231 Introduction to Programming (Python)	<ul> <li>Highly Valued by Companies</li> <li>Leverage <ul> <li>On Resume</li> <li>During Interview</li> </ul> </li> <li>"Cognate" <ul> <li>Unknown Term</li> <li>Confusing Label On Resume</li> <li>Label As "Cognate (Minor)"</li> <li>Explain Cognate Like a Minor</li> <li>Be Careful to Not Misrepresent as Official Mino</li> </ul> </li> </ul>

Objective Education

	School Address Calvin College Grand Rapids, MI 49546 (616) 555-1234	Bob Dyksen bob@dyksen.net	Permanent Address 2175 Burcham Dr. East Lansing, MI 48823 (517) 555-1212		School Address Calvin College Grand Rapids, MI 49546 (616) 555-1234	Bob Dyksen bob@dyksen.net	Permanent Address 2175 Burcham Dr. East Lansing, MI 48823 (517) 555-1212
Objective	To secure a full time position as knowledge in computer science.	a software engineer that utiliz	es my skills and expands my	Objective	To secure a full time position a knowledge in computer science		t utilizes my skills and expands my
Education	<ul> <li>CPSC 210, Web Site</li> <li>CPSC 230, Data Str</li> <li>CPSC 247, Software</li> <li>CPSC 270, Operatin</li> <li>CPSC 300, Compute</li> <li>CPSC 330, Databass</li> <li>CPSC 370, Network</li> <li>CPSC 380, Program</li> <li>CPSC 392, Ethics in</li> <li>CPSC 392, Ethics in</li> <li>CPSC 392, Ethics in</li> </ul>	umulative GPA: 3.13/4.0 tion to Data Structures with C4 Administration (HTML, CG1, L4) uctures and Algorithms (C++, J Engineering (C, UML) g Systems (C++, Java, Perl) er Graphics (OpenGL) ss (mySQL, Oracle, Java) ing (TCP, UDP) ming Languages (C++, ADA, L4)	Perl, Apache Web Server) Java, Visual Studio 6.0) ISP, Smalltalk)	Education	CPSC 300, Compu     CPSC 330, Databa     CPSC 330, Network     CPSC 330, Network     CPSC 330, Network     ENGR 240, Comput     ENGR 240, Comput     Courses Related Projects     Implemented a     Routed IP netv     Optimized rout     Virtual Private Ne     Designed a vir     Implemented a vir	Cumulative GPA: 3.13/4.0 ter Graphics (OpenGL) see (mySQL concele, Java) see (mySQL concele, Java) mming Languages (C++, A languages (C++, A conceletation) and the second ter Architecture (SPARC/ work Router (CPSC 370) L kernel-resident network work traffic across two or n ing times via cached rout	) DA, LISP, Smalltalk) avrity MIPS, Assembly Programming) router. nore NICS. ss. col. g.

SE, Apt H n 49546 at will expand	E.J. Dyksen ej@dyksen.net (517) 555–1234	Permanent Address 2175 Burcham Drive East Lansing, Michigan 48823 (517) 555-1212 rience in computer science.	Interview Tip
ter Science by 2008 Introduction to Computit Introduction to Data Stru- Data Structures and Alg Programming Language Operating Systems and Software Engineering Computer Graphics 20, Introduction to Comp 61, Calculus I 65, Discrete Mathematic 66, Discrete Mathematic	ig (Java) ictures with C++ (C++) orithms (Java) Concepts (Java, Lisp, a Networking uter Architecture (SPAR s for Computer Science	Calvin College Grand Rapids, Michigan nd Scherne)	<ul> <li>Be ready to answer questions like</li> <li>"So, what did you do in CSE 422?"</li> <li>"Tell me about a favorite course."</li> <li>"Tell me about Linux Kernel Network Router."</li> <li>Know Your Courses</li> <li>Topics</li> <li>Books and Readings</li> <li>Projects</li> <li>Know Somo Brainste in Dopth</li> </ul>
			Know Some Projects in Depth <ul> <li>Requirements</li> <li>Implementation</li> <li>Complexities</li> <li>Cool Features</li> </ul>

Skills		School Address Calvin College Grand Rapids, MI 49546 (616) 555-1234	Bob Dyksen bob@dyksen.net	Permanent Addres 2175 Burcham D East Lansing, MI 4882 (517) 555-121
Simple List	Objective	To secure a full time position a knowledge in computer science	as a software engineer that utili: e.	zes my skills and expands my
– Languages	Education	B.A., Computer Science, Expe		alvin College, Grand Rapids, M
- Operating Systems			Cumulative GPA: 3.13/4.0 action to Data Structures with C	
- Software Systems			te Administration (HTML, CGI,	
			tructures and Algorithms (C++,	
<ul> <li>Software Packages</li> </ul>			re Engineering (C, UML)	
Avoid			ing Systems (C++, Java, Perl) ter Graphics (OpenGL)	
			ises (mySQL, Oracle, Java)	
<ul> <li>Relative Trivialities (e.g., MS Word)</li> </ul>		<ul> <li>CPSC 370, Network</li> </ul>		
– BS			mming Languages (C++, ADA, I	LISP, Smalltalk)
- Descibly Clossify (Dut Only If Deam)		CPSC 392, Ethics     CPSC Web Count	in Computing ography and Computer Security	
Possibly Classify (But Only If Room)			ater Architecture (SPARC/MIPS	
- Familiar	Skills	C C++ ADA Smalltalk Lian	Java, Perl, HTML, Windows 20	000/XP UNIX Linux Visual
- Proficient	Chills	Studio 6.0	ouva, i cii, iiiiai, windowo 20	oonii, onin, illinux, risuur
- Certified				

	E.J. Dyksen	
School Address 2148 Raspberry Court SE, Apt H Grand Rapids, Michigan 49546	ej@dyksen.net (517) 555–1234	Permanent Address 2175 Burcham Drive East Lansing, Michigan 48823 (517) 555-1212
Secure an internship that will expand	my knowledge and expe	rience in computer science.
BA, Computer Science Expected May 2008		Calvin College Grand Rapids, Michigan
<ul> <li>CS 112, Introduction to Data Strt.</li> <li>CS 212, Data Structures and Alg.</li> <li>CS 214, Programming Language.</li> <li>CS 232, Operating Systems and CS 262, Software Engineering.</li> <li>CS 352, Computer Graphics</li> <li>ENGR 220, Introduction to Comp.</li> <li>MATH 161, Calculus I</li> <li>MATH 155, Discrete Mathematic</li> </ul>	octures with C++ (C++) oorithms (Java) 9 Concepts (Java, Lisp, ar Networking Duter Architecture (SPAR( s for Computer Science	
	2143 Raspberry Court SE, Apt H Grand Rapids, Michigan 49546 Secure an internship that will expanc BA, Computer Science Expected May 2008 • CS 108, Introduction to Computit CS 112, Introduction to Data Sin CS 212, Data Structures and Ag CS 212, Operating Systems and CS 2522, Operating Systems 40, CS 212, Untroduction to Comp ENGR 220, Introduction to Comp MATH 161, Calculus I MATH 165, Discrete Mathematic • MATH 256, Discrete Structures a Skills • Java, C#, C++, PHP, CSS/XHTM	School Address         e)@@dyksen.net           2148 Raspberry Court SE, Apt H         (517) 555–1234           Grand Rapids, Michigan 49546         (517) 555–1234           Scoure an internship that will expand my knowledge and expe         Expected May 2008           Expected May 2008         (517) 555–1234           C S 108, Introduction to Computing (Java)         (517) 555–1234           C S 121, Introduction to Data Structures with C++ (C++)         (52) 212, Data Structures with C++ (C++)           C S 212, Data Structures and Algorithms (Java)         (52) 24, Operating Equadge Concepts (Java, Lipe, ar           C S 232, Operating Systems and Networking         (53) 352, Computer Graphics           E NOR 202, Introduction to Computer Architecture (SPARC         MATH 161, Calculus I           MATH 161, Calculus I         MATH 165, Discrete Mathematics for Computer Science           MATH 156, Discrete Structures and Linear Algebra         MATH 256, Discrete Mathematics for Computer Science           MIME         Java, C#, C++, PHP, CSS/XHTML, Ruby (and Rails), SOL

Windows Server 2003 System, Exchange Server 2003, IIS 6.0, SQL Server 2005
Microsoft Windows Vista Tablet PC platform Media Center platform Windows Mobile 5.0

Eclipse IDE, Linux, Apache, MySQL, PostgreSQL, other open source products Adobe Premiere Pro 2.0, Adobe After Effects 7.0, Macromedia Fireworks 8.0

	nterview Tip
3.	Be ready to answer questions like
	- "How proficient are you in Perl?"
	- "What have you written using Ruby on Rails?"
	- "Have you ever administered an Exchange Server?"
•	Know Your Skills
	Know Examples of Using Your Skills

Know Your Limitations

C	Experience
Ξ	Position Description
	Company

- Dates
- Bullet List of Accomplishments
  - Concise
  - Specific
  - Begin with Action Verb
  - One Line Per Bullet
  - Sentence Fragments Okay
- Only Most Relevant and Most Recent

#### Skills C, C++, ADA, Smalltalk, Lisp, Java, Perl, HTML, Windows 2000/XP, UNIX, Linux, Visual Studio

#### Experience Software Engineering Internship

- The Boeing Company, St. Louis, MO Made corrections in T-38C cockpit software Summer 2002
   Used System Integration Lab (SIL) to test changes to MDP software
   Developed ACMI debrief application for T-38C aircraft (SDT, C++, Visual Studio 6.0)

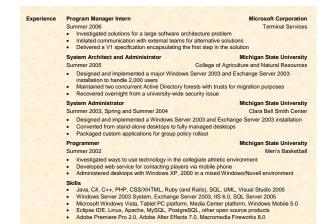
  - Participated in software development proce
- Software Engineering Internship Participated in SEI Level 3 Activities The Boeing Company, St. Louis, MO Summer 2001
  - Participated in SEL Level o Activities
     Developed automated testing utilities for the AHWCS project (Java, C++)
  - Tested the launch control software for the Harpoon Block II missile
  - Managed group web pages

#### Program Analyst Internship

Designed and implemented software (Java, some C++)Summer 2000 - Spring 2001
 Involved in a major company project

Mutual of Omaha, Omaha, NE

- Worked closely with associates from other companies (Trilogy, ICONIXX)
- First telecommuting intern



**Interview** Tip Be ready to answer questions like... - What kind of corrections did you make to the T38C software? What's an SEI Level 3 activity? What's a V1 specification? - What was the university-wide security issue and how did you recover? Know Your Summer Internships - Concise Description Software Systems - Your Responsibilities Know Some Specific Accomplishments



perience	Software Engineering Internship The Boeing Company, St. Louis, MO
	Made corrections in T-38C cockpit software     Summer 2002
	Used System Integration Lab (SIL) to test changes to MDP software
	• Developed ACMI debrief application for T-38C aircraft (SDT, C++, Visual Studio €
	Participated in software development processes
	Software Engineering Internship The Boeing Company, St. Louis, MO
	Participated in SEI Level 3 Activities     Summer 2001
	<ul> <li>Developed automated testing utilities for the AHWCS project (Java, C++)</li> </ul>
	Tested the launch control software for the Harpoon Block II missile
	Managed group web pages
	Program Analyst Internship Mutual of Omaha, Omaha, NE
	<ul> <li>Designed and implemented software (Java, some C++)Summer 2000 - Spring 2001</li> </ul>
	Involved in a major company project
	Worked closely with associates from other companies (Trilogy, ICONIXX)
	First telecommuting intern
Hobbies	Licensed Private Pilot
	Piano & Pipe Organ

System Architect and Administrator	Michigan State University
Summer 2005	College of Agriculture and Natural Resources
installation to handle 2,000 users	ndows Server 2003 and Exchange Server 2003 tory forests with trusts for migration purposes wide security issue
System Administrator	Michigan State University
Summer 2003, Spring and Summer 2004	Clara Bell Smith Center
<ul> <li>Converted from stand-alone desktops to</li> <li>Packaged custom applications for group</li> </ul>	policy rollout
Programmer	Michigan State University
Summer 2002	Men's Basketball
<ul> <li>Investigated ways to use technology in t</li> <li>Developed web service for contacting pl</li> <li>Administered desktops with Windows XI</li> </ul>	
Skills	
<ul> <li>Windows Server 2003 System, Exchange</li> </ul>	
First Place, <u>Memories Category</u> , <u>Micros</u> Choral Honor Award, Okemos High Sch	oft Start Something Amazing Awards, 2005 nool, Okemos, Michigan, 2004
Calvin IMPROV, Leader	

#### Capella Choir of Calvin College

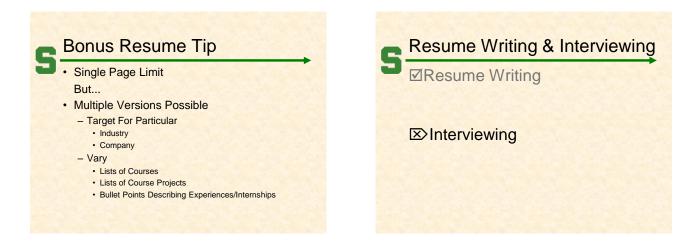
Awa

Software Engineer Intern	Toro, Riverside,
	Fall 20
<ul> <li>Worked on a team of for</li> </ul>	ur students in MSU senior capstone course
· Designed and implement	nted Golf Vision Interface for Turf Guard
· Worked directly with cu	stomer to develop a complete project plan
Produced video about p	roject and delivered software product
Awarded the TechSmith	Screencast Award

Test Printing of Resume (on Paper)
Submit pdf, Not Word Source

#### **Bonus Resume Tip Interview** Tip Be ready to answer questions like... Learn how to use Microsoft Word! - Use Paragraph Spacing - "So, what do you do for fun?" Do use paragraph spacing between lines. Do <u>not</u> use empty lines, i.e., just hit return. - "What do you do when you're not working?" - "Do you have any hobbies?" - Use Styles - Use Tabs - "What's ACM?" • To Line Up Things - "What did you do accomplish as president of WIC?" · Do not use spaces, which won't work anyway. - Use Right Justified Tabs To Justify Things on the Right Margin Do <u>not</u> use tabs and/or space, which won't work anyway. - Etc..

#### Department of Computer Science and Engineering Michigan State University



## **Clean Up Your Web Presence** Facebook

- MySpace
- Personal Web Pages
- Flickr
- Twitter
- Etc...

HR people will and do check these things out. What about my 1st Amendment rights?

#### **Due Diligence**

- · Research the company.
- · Research the interview.
  - Talk with others who have been interviewed. - Ask "What style of interview should I expect?"
- · Research the interviewers.
  - Get an interview schedule with names and titles.
  - Figure out who does what.
  - Google for interviewer interests and hobbies.
- · Research the dress code. Ask recruiter/interviewer.
  - Ask others.

ist of Be

- Do not be surprised.
- Etc...



- Type to Be Used
- · Do not be surprised.

Department of Computer Science and Engineering Michigan State University

#### **Behavioral Interview Questions**

- Describe a situation in which you were able to use persuasion to successfully convince someone to see things your way.
- Describe a time when you were faced with a stressful situation that demonstrated your coping skills. 2.
- Give me a specific example of a time when you used good judgment and logic in solving a problem. 3.
- Give me an example of a time when you set a goal and were able to meet or achieve it. 4.
- 5.
- Tell me about a time when you had to use your presentation skills to influence someone's opinion.
- Give me a specific example of a time when you had to conform to a policy with which you did not agree. 6.
- Please discuss an important written document you were required to complete. 8. Tell me about a time when you had to go above and beyond the call of duty in order to get a job done.
- Tell me about a time when you had too many things to do and you were required to prioritize your tasks. 9.
- Give me an example of a time when you had to make a split second decision. 10.
- 11.
- What is your typical way of dealing with conflict? Give me an example. Tell me about a time you were able to successfully deal with another person even when that individual may not have personally liked you (or vice versa).

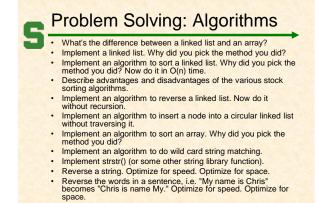
#### **Behavioral Interview Questions**

- 13. Tell me about a difficult decision you've made in the last year. 14. Give me an example of a time when something you tried to accomplish and failed.
- 15. Give me an example of when you showed initiative and took the lead. 16. Tell me about a recent situation in which you had to deal with a very
- upset customer or co-worker. 17. Give me an example of a time when you motivated others
- 18.
- Tell me about a time when you delegated a project effectively. Give me an example of a time when you used your fact-finding skills to solve a problem.
- Tell me about a time when you missed an obvious solution to a problem. 20.
- 21. Describe a time when you anticipated potential problems and developed preventive measures.
- Tell me about a time when you were forced to make an unpopular decision. 22.
- 23. Please tell me about a time you had to fire a friend.
- 24. Describe a time when you set your sights too high (or too low).



## Problem Solving: Riddles

- Why is a manhole cover round? How many cars are there in the USA? (A popular variant is "How many gas stations are there in the USA?")
- are there in the USA? How many manhole covers are there in the USA? You've got someone working for you for seven days and a gold bar to pay them. The gold bar is segmented into seven connected picces. You must give them a piece of gold at the end of every day. If you are only allowed to make two breaks in the gold bar, how do you pay your worker?
- gold at the end of every day. If you are only allowed to make two breaks in the gold bar, how do you pay you worker? One train leaves Los Angeles at 15mph heading for New York. Another train leaves from New York at 20mph heading for Los Angeles on the same track. If a bird, flying at 25mph, leaves from Los Angeles at the same time as the train and flies back and forth between the two trains until they collide, how far will the bird have traveled? Imagine a disk spinning like a record player turn table. Half of the disk is black and the other is white. Assume you have an until hey collide, how far will are volted? Imagine a disk spinning like a record player turn table. Half of the disk is black and the other is white. Assume you have an until hey collide word color sensors. How many sensors would you have to place around the disk to determine the direction the disk is spinning? Where would they be placed? Imagine an analog clock set to 12 o clock. Note that the hour and minute hands overlap? How would you determine the exact times of the day that this occurs? You have two jars, 50 red marbles and 50 blue marbles. A jar will be picked at random, and *then* a marble will be picked from the jar. Placing all of the marbles in the jars, how can you maximize the chances of a red marble being picked? What are the exact odds of getting a red marble using your scheme?



## **Problem Solving: Applications**

- How can computer technology be integrated in an elevator system for a hundred story office building? How do you optimize for availability? How would variation of traffic over a typical work week or floor or time of day affect this?
- How would you implement copy-protection on a control which can be embedded in a document and duplicated readily via the Internet?
- Define a user interface for indenting selected text in a Word document. Consider selections ranging from a single sentence up through selections of several pages. Consider selections not currently visible or only partially visible. What are the states of the new UI controls? How will the user know what the controls are for and when to use them? How would you redesign an ATM?
- Suppose we wanted to run a microwave oven from the computer. What kind of software would you write to do this?
- What is the difference between an Ethernet Address and an IP address?
- How would you design a coffee-machine for an automobile. If you could add any feature to Microsoft Word, what would it be?
- How would you go about building a keyboard for 1-handed users?
- How would you build an alarm clock for deaf people?

# **Problem Solving: Thinkers** How are M&Ms made? If you had a clock with lots of moving mechanical parts, you took it apart piece by piece without keeping track of the method of how It was disassembled, then you put it back together and discovered that 3 important parts were not included, how would you go about reassembling the clock? If you had to learn a new computer language, how would you go about doing it? You have been assigned to design BIII Gates bathroom. Naturally, cost is not a consideration. You may not speak to BIII. What was the hardest question asked of you so far today? If MS told you we were willing to invest \$5 million in a start up of your choice, what business would you start? Why? If you could dather all of the computer manufacturers in the world together into one

- If you could gather all of the computer manufacturers in the world together into one room and then tell them one thing that they would be compelled to do, what would it be? Explain a scenario for testing a salt shaker.
- If you are going to receive an award in 5 years, what is it for and who is the audience?
- audience? How would you explain how to use Microsoft Excel to your grandma? Why is it that when you turn on the hot water in any hotel, for example, the hot water comes pouring out almost instantaneously? Why do you want to work at Microsoft? Suppose you go home, enter your house/apartment, hit the light switch, and nothing happens no light floods the room. What exactly, in order, are the steps you would take in determining what the problem was?
  - Interviewer hands you a black pen and says nothing but "This pen is red."



### What's the point? Will you get these exact questions?

- · You might.
- · But probably not.
- · So, what's the point?

## Look the Part

- · People do judge books by their covers.
- Research the "look".
- If you want the "part", "look" the "part".
- Appearance
  - Clothes
  - Shoes
  - Hair (Style, Length, Colors, ...) - Body Piercings
  - Etc...

#### Look the Part

- Get Advice From Someone With Taste
  - Styles in General
  - What Looks Good on You
  - Size and Fit
  - Whole Package
    - · Clothes
    - · Shoes
    - · Jewelry • Hair
    - Etc...
- Do due dilligence.
- Expectations for interviewee may be very different than for interviewer or employee.

## **Your Personal Presence**

- Introduce Yourself
- · Learn How to Shake Hands
- Avoid Nervous Habits
- Make Eye Contact (But Don't Stare Down)
- · Gives "Right Length" Answers - Long Enough
  - Not Too Long
- If Necessary
  - Repeat Question to Buy Time - Ask for Clarification
- Practice Wearing Interview Attire

## The First Question

- · What's the first question at many interviews?
- · Tell me/us about yourself.
- Be Ready
- Practice Answer
  - Avoid
  - Too Short
  - Too Long
  - Too Vague
  - To Detailed

#### Bad Comments to Make

- ...During the Interview
- "I see you just lost that big contract to Acme."
- "Wow, your stock price really took a hit yesterday."
- "It sure looks like the cost of living is high here."
- "I hear a lot of complaints about Vista."
- "I didn't do well in that course because the professor sucked."
- "I didn't do well in that course because I wasn't interested in it."
- Etc...

## S

## Bad Questions to Ask...

- ...During the Initial Interview
- "How much will I make?"
- "How much vacation will I get?"
- "Is there dental coverage?"
- "Will you pay moving expenses?"
- "Will I get my own office?"
- "How soon will I be promoted?"
- "Will I have to work more than 40 hours per week?"
- Etc...

(What if they ask you "How much do you expect to make?"

#### Good Comments to Make ...

#### ... During the Interview

- "That T-38 looks like a really cool plane."
- "The 787 looks amazing. Passengers will really like the large windows."
- "Alan Mulally looks like a great hire."
- "I've been running Windows 7 RC1 and it's great."
- "I'm running Exchange Server out of my apartment."

#### The Last Question

- What's the last question at many interviews?
- · Do you have an questions for me/us?
- What's a really bad answer?
- · What are some good answers?

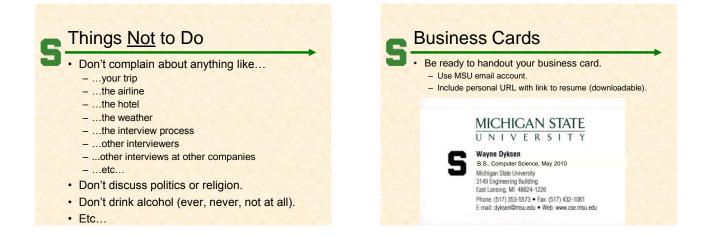
## Good Questions to Ask...

#### ... During the Interview

- "Are there opportunities for professional development?"
- "Is there support for advanced degrees?"
- "What career paths are available?"

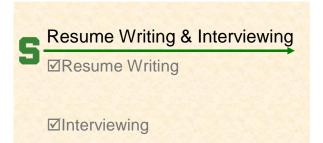
#### Okay Questions to Ask...

- "What's the corporate culture like?"
- "What's a typical week like?"





- Try to Include Brief Personal Comment
  - Related to Interviewer
  - Record Info on Back of Business Card ASAP



**Questions?**