


10. Resume Writing and Interviewing



CSE 498, Collaborative Design

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Department of Computer Science and Engineering
Michigan State University
Fall 2008

S Purpose

- Resume
 - Get Noticed
 - Get an Interview
 - Get in the Door
- Interview
 - Tell Your Story
 - Get a Good First Job
 - Start a Successful Career

S Caveats Resume Writing & Interviewing

- Partly...
 - Science
 - Art
- Lots of Opinions
 - Varied
 - Sometimes Conflicting
- Always Exceptions to Every Rule
- Do what works for you.

S Resume Writing & Interviewing

Resume Writing

Interviewing

S 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?

S Resume Nota Bene

Every Last Detail Matters

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

S Resumes 101

- Exactly One Page
- Simple Formatting (Scan-able)
- Honest
- Contains...
 - Contact Information
 - Objective
 - Education
 - Skills
 - Experience
 - Other Activities

S Contact Information (1 of 3)

- Name
- Email Address (Use "Professional" Email Address)
 - No
 - TheGamingWizard@hotmail.com
 - HotToTrot@gmail.com
 - Yes
 - dyksen@msu.edu
 - [wayne@dyksen.com](http://wayne.dyksen.com)
 - wayne.dyksen@gmail.com
- US Mail Address
 - School (Your Apartment)
 - Permanent (Your Home Address(Parents'?))
(What if I want to contact you after you leave MSU?)

S Contact Information (2 of 3)

- Phone
 - Local
 - Probably Not Your Apartment Phone (Why not?)
 - Your Cell Phone
 - No Cell Phone? Get one.
 - Providers offer pay-as-you-go service.
 - Permanent
 - Your "Home" Phone (Parents'?)
 - What if I want to call you after you leave MSU?
 - Include Area Codes
 - Get "Voicemail" for All Phones

S Contact Information (3 of 3)

- Phone
 - Fix your voicemail "not here" messages.
 - No
 - "Hey baby! You've reached the voicemail of the hottest guy at MSU. Leave your number and I'll give you a ring but only if you're lucky."
 - "I'm not here. Leave a message."
 - "Hi. I'm sorry I missed your call. Please leave me a message and I'll get back to you. Thanks for calling and have a great day."
 - Yes (Include Your Name!)
 - "Hi. This is Wayne Dyksen and you've reached my cell phone voice mailbox. Please leave me a message and I'll get back to you. Thanks for calling and have a great day."

S Objective

- Very Concise (One Line)
- Indicate Internship or Permanent Employment
- Avoid Flowery BS
- Examples
 - 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.

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 a software engineer that utilizes my skills and expands my knowledge in computer science.

<p>School Address 2148 Raspberry Court SE, Apt H Grand Rapids, Michigan 49546</p>	<p>E.J. Dyksen ej@dyksen.net (517) 555-1234</p>	<p>Permanent Address 2175 Burcham Drive East Lansing, Michigan 48823 (517) 555-1212</p>
<p>Objective Secure an internship that will expand my knowledge and experience in computer science.</p>		

S Interview Tip

- Be ready to answer questions like ...
 - “What do you like to do?”
 - “What kind of positions interest you?”
 - “Where do you want to be in five years?”
- Know Positions
 - Program Manager
 - Developer
 - Tester
 - Etc...

S Education

- Degree

– Major	BS
– Cognate	Computer Science Business
– Date Expected	May 2008
– Institution	Michigan State University
- GPA

– Cumulative	3.50/4.0
– CSE	3.70/4.0
- Relevant Courses

– Number	CSE 231
– Title	Introduction to Programming
– Topics in Parentheses	(C++, .NET)
- Non-MSU Institutions
 - May Include Other Colleges/Universities
 - Do Not Include High School

S Cognate

- Highly Valued by Companies
- Leverage
 - On Resume
 - During Interview
- “Cognate”
 - Unknown Term
 - Confusing Label On Resume
 - Label As “Cognate (Minor)”
 - Explain Cognate
 - Like a Minor
 - But MSU Does Not Have Minors
 - Be Careful to Not Misrepresent as Official Minor

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Education
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 Expected May 2008
Calvin College
 Grand Rapids, Michigan

- CS 108, Introduction to Computing (Java)
- CS 112, Introduction to Data Structures with C++ (C++)
- CS 212, Data Structures and Algorithms (Java)
- CS 214, Programming Language Concepts (Java, Lisp, and Scheme)
- CS 232, Operating Systems and Networking
- CS 262, Software Engineering
- CS 352, Computer Graphics
- ENGR 220, Introduction to Computer Architecture (SPARC Assembly)
- MATH 161, Calculus I
- MATH 156, Discrete Mathematics for Computer Science
- MATH 256, Discrete Structures and Linear Algebra

S Interview Tip

- Be ready to answer questions like...
 - “So, what did you do in CSE 422?”
 - “Tell me about a favorite course.”
 - “Tell me about a favorite project.”
- Know Your Courses
 - Topics
 - Books and Readings
 - Projects
- Know Some Projects in Depth
 - Requirements
 - Implementation
 - Complexities
 - Cool Features

S Skills

- Simple List
 - Languages
 - Operating Systems
 - Software Systems
 - Software Packages
- Avoid
 - Trivialities (MS Word)
 - BS
- Possibly Classify (But Only If Room)
 - Familiar
 - Proficient
 - Certified

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Skills
 C, C++, ADA, Smalltalk, Lisp, Java, Perl, HTML, Windows 2000/XP, UNIX, Linux, Visual Studio 6.0

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- MATH 256, Discrete Structures and Linear Algebra

Experience

Skills

- Java, C#, C++, PHP, CSS/XHTML, Ruby (and Rails), SQL, UML, Visual Studio 2005
- 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

S Interview Tip

- 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

S Experience

- Position Description
- Company
- Dates
- Bullet List of Accomplishments
 - Concise
 - Specific
 - Begin with Action Verb
 - 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 6.0

- Experience**
- | | |
|--|--|
| Software Engineering Internship | The Boeing Company, St. Louis, MO |
| <ul style="list-style-type: none"> • Made corrections in T-38C cockpit software • 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 processes | Summer 2002 |
| Software Engineering Internship | The Boeing Company, St. Louis, MO |
| <ul style="list-style-type: none"> • Participated in SEI Level 3 Activities • Developed automated testing utilities for the AHWCS project (Java, C++) • Tested the launch control software for the <i>Harpoon Block II</i> missile • Managed group web pages | Summer 2001 |
| Program Analyst Internship | Mutual of Omaha, Omaha, NE |
| <ul style="list-style-type: none"> • Designed and implemented software (Java, some C++) Summer 2000 - Spring 2001 • Involved in a major company project • Worked closely with associates from other companies (Trilogy, ICONIXX) • First telecommuting intern | Summer 2000 - Spring 2001 |

Experience

Program Manager Intern	Microsoft Corporation
Summer 2006	Terminal Services

- Investigated solutions for a large software architecture problem
- Initiated communication with external teams for alternative solutions
- Delivered a V1 specification encapsulating the first step in the solution

System Architect and Administrator	Michigan State University
Summer 2005	College of Agriculture and Natural Resources

- Designed and implemented a major Windows Server 2003 and Exchange Server 2003 installation to handle 2,000 users
- Maintained two concurrent Active Directory forests with trusts for migration purposes
- Recovered overnight from a university-wide security issue

System Administrator	Michigan State University
Summer 2003, Spring and Summer 2004	Clara Bell Smith Center

- Designed and implemented a Windows Server 2003 and Exchange Server 2003 installation
- Converted from stand-alone desktops to fully managed desktops
- Packaged custom applications for group policy rollout

Programmer	Michigan State University
Summer 2002	Men's Basketball

- Investigated ways to use technology in the collegiate athletic environment
- Developed web service for contacting players via mobile phone
- Administered desktops with Windows XP, 2000 in a mixed Windows/Novell environment

Skills

- Java, C#, C++, PHP, CSS/XHTML, Ruby (and Rails), SQL, UML, Visual Studio 2005
- 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

S 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?
 - Tell me how you used group policy at the Clara Bell Smith Center?
 - 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

S Other Activities

- Including...
 - Awards
 - Hobbies
 - Outside Interests
- Concise
- Avoid
 - Trivialities
 - BS
- Omit If None

Experience

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Hobbies

- Licensed Private Pilot
- Piano & Pipe Organ

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Skills	
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Awards	
<ul style="list-style-type: none"> First Place, Memories Category, Microsoft Start Something Amazing Awards, 2005 Choral Honor Award, Okemos High School, Okemos, Michigan, 2004 	
Activities	
<ul style="list-style-type: none"> Calvin IMPROV, Leader Capella Choir of Calvin College 	

S Interview Tip

- Be ready to answer questions like...
 - “So, what do you do for fun?”
 - “What do you do when you’re not working?”
 - “Do you have any hobbies?”
 - “What’s ACM?”
 - “What did you do accomplish as president of ACM?”

S Bonus Resume Tip

- Learn how to use Microsoft Word!
 - Use Paragraph Spacing
 - Do use paragraph spacing between lines.
 - Do not use empty lines, i.e., just hit return.
 - Use Styles
 - Use Tabs
 - To Line Up Things
 - Do not use spaces, which won’t work anyway.
 - Use Right Justified Tabs
 - To Justify Things on the Right Margin
 - Do not use tabs and/or space, which won’t work anyway.
 - Etc...
- Test Printing of Resume (on Paper)
- Submit pdf, Not Word Source

S Bonus Resume Tip

- Single Page Limit
- But...
- Multiple Versions Possible
 - Target For Particular
 - Industry
 - Company
 - Vary
 - Lists of Courses
 - Lists of Course Projects
 - Bullet Points Describing Experiences/Internships

S Resume Writing & Interviewing

Resume Writing

Interviewing

S Clean Up Your Web Presence

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

HR people will and do check these things out.

What about my 1st Amendment rights?

S Interview Styles

- Many & Varied
 - Technical (What do you know about IPv6?)
 - Problem-Solving (In the adjacent room are three lights...)
 - Behavioral (Tell me about a time when...)
 - Coding (Write a recursive function that...)
 - Etc...
- Research
 - Types of Interview
 - Questions for Each Type
 - Type to Be Used
- Do not be surprised.

S 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.
- Do not be surprised.
- Etc...

S Look the Part

- People do judge books by their cover.
- Research the “look”.
 - If you want the “part”, “look” the “part”.
 - Appearance
 - Clothes
 - Shoes
 - Hair (Style, Length, Colors, ...)
 - Body Piercings
 - Etc...
 - Get Advice From Someone With Taste
 - Expectations for interviewee may be very different than for interviewer or employee.

S 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

S 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

S 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?”)

S 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.”
- “Nardelli looks like a great hire.”
- “I’ve been using Vista RTM and it’s great.”
- “I’m running Exchange Server out of my apartment.”
- “I see you’re building a new facility in MSU’s research park.”

S The Last Question

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

S 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?”

S Things Not to Do

- Don’t complain about anything like...
 - ...your trip
 - ...the airline
 - ...the hotel
 - ...the weather
 - ...the interview process
 - ...other interviewers
 - ...other interviews at other companies
 - ...etc...
- Don’t discuss politics or religion.
- Don’t drink alcohol (ever, never, not at all).
- Etc...

S Business Cards

- Be ready to handout your business card.
 - Use MSU email account.
 - Include personal URL with link to resume (downloadable).



S Follow-Up

- ASAP
- Hand-Written Note
 - US Mail
(Get Business Cards for Address)
 - Buy Nice Note Cards
- Try to Include Brief Personal Comment
 - Related to Interviewer
 - Record Info on Back of Business Card ASAP

S Resume Writing & Interviewing

- Resume Writing
- Interviewing

Questions?