

MICHIGAN STATE

U N I V E R S I T Y

02/14:

Resume Writing and Interviewing

The Capstone Experience

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Michigan State University

Spring 2017



*From Students...
...to Professionals*

Purpose

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



Caveats Resume Writing & Interviewing

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



Resume Writing and Interviewing

➤ Resume Writing

- Interviewing

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



Resumes 101

- Exactly One (Full) Page
 - Not More
 - Not Less
- Simple Formatting
(Machine (Optical) Scan-able)
- Honest
- Contains...
 - Contact Information
 - Objective
 - Education
 - Skills
 - Experience
 - Other Activities



Contact Information

[1 of 3]

- Name
- Email Address
(Use “Professional” Email Address)
 - No
 - TheGamingWizard@hotmail.com
 - BarCrawler@gmail.com
 - Yes
 - dyksen@msu.edu
 - wayne@dyksen.com
 - wayne.dyksen@gmail.com
- US Mail Address
 - Current (Your Apartment)
 - Permanent (Your Home Address (Parents’?)
(What if I want to contact you after you leave MSU?)



Contact Information

[2 of 3]

- Phone
 - Current
 - Probably Your Cell Phone
 - No Cell Phone?
 - ❖ Get one.
 - ❖ Providers offer (cheap) pay-as-you-go service.
 - Permanent
 - Your “Home” Phone (Parents’)?
 - Your Cell Phone?
 - What if I want to call you after you leave MSU?
 - Include Area Codes
 - Get “Voicemail” for All Phones



- Phone

- Fix your voicemail “not here” messages.

- No

- ❖ “Hey there! You’ve reached the voicemail of the funnest person at MSU. Leave your number and I’ll give you a ring but only if you’re one of the lucky people.”

- ❖ “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 voicemail. Please leave me a message and I’ll get back to you. Thanks for calling and have a great day.”



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.
- 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.



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.

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

Objective

Secure an internship that will expand my knowledge and experience in computer science.



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 (PM) or Developer (Dev)
 - Associate Software Developer
 - Associate/Sr. Consultant
 - Etc...



Your GPA

- Used by Companies for Screening
 - Use Varies by Company
 - If GPA < Threshold then No Interview?
 - Threshold Varies by Company
- On Resume
 - Probably. Almost Certainly (IMHO)
 - Easy to Find
 - If GPA not there...
 - I'm thinking...
 - I'm going to...
 - Remove After First Job



So-So GPA's

- Compute “Sub” GPA's
 - Overall vs CSE
 - Freshman vs Sophomore Through Senior
 - Freshman/Sophomore vs Junior/Senior
 - Freshman, Sophomore, Junior, Senior
 - Etc...
- Give a Good Explanation
 - Was Immature. Grew Up.
 - Not Motivated When Freshman, Am Now
 - Worked 40 Hours/Week to Pay for School
 - Etc...



Education

- Degree BS
- Major Computer Science
 - Cognate Business
 - Minor Mathematics
 - Date Expected May 2017
- 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 (Python)
- Non-MSU Institutions
 - May Include Other Colleges/Universities
 - Do Not Include High School



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
 - Be Careful to Not Misrepresent as Official Minor



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Education

B.A., Computer Science, Expected December 2002

Calvin College, Grand Rapids, MI

- CS GPA: 3.50/4.0, Cumulative GPA: 3.13/4.0
- CPSC 186, Introduction to Data Structures with C++ (C++, Visual Studio 6.0)
- CPSC 210, Web Site Administration (HTML, CGI, Perl, Apache Web Server)
- CPSC 230, Data Structures and Algorithms (C++, Java, Visual Studio 6.0)
- CPSC 247, Software Engineering (C, UML)
- CPSC 270, Operating Systems (C++, Java, Perl)
- CPSC 300, Computer Graphics (OpenGL)
- CPSC 330, Databases (mySQL, Oracle, Java)
- CPSC 370, Networking (TCP, UDP)
- CPSC 380, Programming Languages (C++, ADA, LISP, Smalltalk)
- CPSC 392, Ethics in Computing
- CPSC W80, Cryptography and Computer Security
- ENGR 220, Computer Architecture (SPARC/MIPS, Assembly Programming)



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- CPSC W80, Cryptography and Computer Security
- ENGR 220, Computer Architecture (SPARC/MIPS, Assembly Programming)

Course Related Projects

- Linux Kernel Network Router (CPSC 370)
 - Implemented a kernel-resident network router.
 - Routed IP network traffic across two or more NICS.
 - Optimized routing times via cached routes.
- Virtual Private Network (CPSC W80)
 - Designed a virtual private network protocol.
 - Implemented a VPN via TCP/IP tunneling.
 - Utilized DES3 cryptography for secure IP data packets.



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Education

BA, Computer Science

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



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 Linux Kernel Network Router.”
- Know Your Courses
 - Topics
 - Books and Readings
 - Projects
- Know Some Projects in Depth
 - Requirements
 - Implementation
 - Complexities
 - Cool Features



Skills

- Simple List
 - Languages
 - Operating Systems
 - Software Systems
 - Software Packages
- Avoid
 - Relative Trivialities (e.g., Microsoft Word)
 - Weak or Non-Existent Skills
 - BS (Effective Team Member, Customer Oriented, etc.)
- Possibly Classify (But Only If Room)
 - Familiar
 - Proficient
 - Certified



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- CPSC W80, Cryptography and Computer Security
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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



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
 - Examples of Using Your Skills
 - Your Limitations



Experience

- 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



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
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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



Other Activities

- Including...
 - Clubs
 - Awards
 - Hobbies
 - Outside Interests
- Concise
- Avoid
 - Trivialities and/or BS
 - High School Activities and/or Awards
- Omit If None



- 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)
 - Participated in software development processes

- Software Engineering Internship** **The Boeing Company, St. Louis, MO**
 - Participated in SEI Level 3 Activities Summer 2001
 - 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** **Mutual of Omaha, Omaha, NE**
 - 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, ICONIX)
 - First telecommuting intern

- Hobbies**
- Licensed Private Pilot
 - Piano & Pipe Organ

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- 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

Awards

- First Place, [Memories Category](#), [Microsoft Start Something Amazing Awards](#), 2005
- Choral Honor Award, Okemos High School, Okemos, Michigan, 2004

Activities

- Calvin IMPROV, Leader
- Capella Choir of Calvin College

Good idea to include links.



Leveraging the Capstone Course

**Software Engineer Intern
Meijer**

Fall 2014

Grand Rapids, Michigan

- Worked on a team of four students in MSU senior capstone course.
- Designed and implemented [Mobile Location-Based Product Promotion](#).
- Worked directly with customer to develop a complete project plan.
- Produced [video](#) about project and delivered software product.
- Awarded the [Urban Science Sigma Award](#).

Good idea to include links.



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 WIC?”



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...
- Submit PDF, Not Word Source
- Test Print Resume (on Paper)



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



Resume Writing and Interviewing

✓ Resume Writing

➤ Interviewing



Clean Up Your Web Presence

- Facebook
- Twitter
- Snapchat
- Personal Web Pages
- Etc...

HR people will and do check these things out.

What about your 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.
- Do not be surprised.



Interview Styles

- Many & Varied
 - Technical (How does IPv6 differ from IPv4?)
 - 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.



What's the point?

Will you get these exact questions?

- You Might
- But Probably Not
- So, what's the point?



Look the Part

[1 of 2]

- 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

[2 of 2]

- 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 diligence.
- Expectations for interviewee may be very different than expectations 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)
- Give “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
 - Too 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.”
- “Windows 8 was a big mistake.”
- “I didn’t do well in that course because the professor was terrible.”
- “I didn’t do well in that course because I wasn’t interested in it.”
- Etc...



Bad Questions to Ask...

...During the Initial Interview

- “Can you tell me what your company does?”
- “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 structure bearing windows.”
- “Alan Mulally was a great hire for you.”
- “I’m running Windows 10 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 any 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?”



Things Not to Do

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



Business Cards

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



Follow-Up

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



Resume Writing and Interviewing

✓ Resume Writing

➤ Interviewing

