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Interacting with the University of Michigan Engineering Career Center.

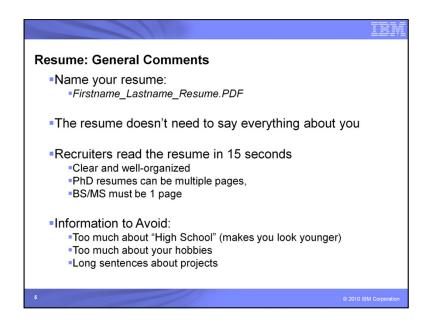
## Why would we tell you the secrets of recruiting? Recruiters are generally not the "hiring managers" Recruiters must "sell" students to hiring managers Students must "distinguish themselves" to recruiters Students create the "sales case" for the recruiters Competition is with U-M peers and students from other top schools Be as good as you can be when you leave the U-M Take advantage of opportunities here at Michigan Be successful in your summer positions Know how to "Distinguish Yourself" Make "sales case" for recruiters to use with hiring managers

Generally speaking, the recruiters who come to campus are not the hiring managers (managers with opening in their departments). The recruiters on campus are familiar with the university, the faculty and the administrators. The recruiters job is to identify students that match job openings in the company and then turn around and sell those students to the hiring managers. The students job is to "distinguish themselves" so that they are not only better than their peers at the University of Michigan, but they are also better than students in other good schools in the United States.

Through this presentation, we want you to be as good as you can be by taking advantages of opportunities here on campus and summer work positions with employers. The information in this presentation will allow you to create an excellent "sales case" for the recruiter to use with the hiring managers.



In this session, we will cover the things you might want to think about as you go through the University of Michigan. The items we will discuss will prepare you for interviewing for a job after completing your degree program. We will identify some good ideas to include in your resume and some things to avoid putting into your resume. We will cover when it is a good idea to continue on for a MS degree following a BS degree. There will be a discussion of the difference between Internships and Coops and the advantages of doing one over the other. We will identify some good things to do when you are working for a company. We will cover some information for International students on F1 Visas. We will also discuss some strategies for the interviewing with a company recruiter. Finally, we will go over some common resume mistakes so that you can avoid them in your resume.



The resume is the document that allows you to explain your education, skills and work experience. It needs to be specific and relevant to the job you are interested in obtaining. You can have more than one resume if you are interested in more than one type of job. Generally, university students have only one resume. The resume does not need to show every detail in your life.

Most recruiters review many resumes for each job opening. They often need to narrow down a set of resumes if they have a limited number of interview slots. The recruiter needs to size up a resume in about 15 seconds before they look at the details for a longer period of time. A clear and well-organized resume makes it easier for the recruiter to do this.

A resume for a BS or MS major should fit on one page. I have rarely seen a resume that warrants more than one page. When it is longer, it is usually because there is too much detail or there is work experience that should not be on the resume. A resume for a PhD candidate will always be longer than one page because Doctoral candidates have publications that need to be listed in the resume.

A college student should avoid putting too much information about their High School experience. Your high school education was undoubtedly impressive since you were accepted into the University of Michigan. However, the more information you put in your resume about your High School years, the more younger you appear to the recruiter. Your High School education got you into the University of Michigan, but it is your college experience that will get you your job. If you were the Valedictorian or you had very high SAT scores, then you can put these on your resume in the

Awards/Honors section. However, I would generally avoid listing your High School under the Education section.

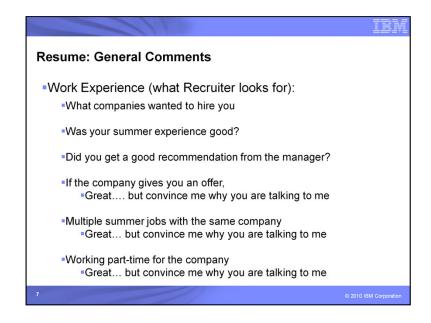
## Resume: General Comments Able to talk about anything on resume Not good to say "too long ago", "don't remember" List "Permanent" or "Summer" and "Availability Date" Goes in Objective Statement Put Visa Status on Resume (US Citizen or Perm Resident) Especially if you have a foreign-sounding name List Leadership Positions on Resume

You should be able to talk about or expand on anything that you put in your resume. It may be necessary to review your resume prior to an interview. If you are a Senior and you have a course listed that you took as a Sophomore, you should review a few things about that course so you can sound as if you just took it yesterday. It is never good to tell a recruiter, "I took that course a long time ago and I really don't remember it very well."

It is a good idea to be able to immediately talk about your resume for 15-30 seconds. This can be in response to a question like "tell me about yourself". You should be able to do this without looking at the resume. This also allows you to control the direction of the interview. It is equally important not to ramble on during this time. This response should be well-thought out and specific to your skills and interests.

It is good to put near the top of the resume that you are looking for a Permanent (full-time) position, or a Summer (3-4 months) or Coop (6-8 months) job. It is okay to say that you could do either a Summer or Coop position. The resume is often passed between Hiring Managers and this type of information will be useful to them. If you are a US Citizen or a Permanent Resident, you could list this on your resume, too.

It is also good to mention any true leadership positions that you have had with real responsibilities. A leadership position indicates that you will be able to lead others in a team environment.



Your summer work experience is very important. The work should be in your field of study. You can work for a company or you can work on a research project with a Professor. The summer work experience allows a company to evaluate you and for you to evaluate the company. You should make every effort to fit into the team and to work well with others. It is crucial for you to get on well with the Manager of the department.

When a recruiter is asking you questions about your work experience, they are looking to see if you had a good experience with the company. Your experience with one company is a good predictor with how you may work out with their own company. When you are discussing your summer jobs, you should be positive about your work and you should convey how well you worked with the other members of the team. The recruiter will want to know if you received a good recommendation from your Manager. If the company hired you back for a subsequent job, that is a very good sign to the recruiter. If the company extended you an offer for a full-time position, that is also a good indicator. If the company asked you to continue working during the school year, then that is another excellent piece of information for the recruiter.

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Resume: General Comments

Put the GPA on your resume
    "Otherwise, I have to ask you for it

List relevant courses for your degree (with course #)
    "If the course is listed, be able to talk about it.
        "Know at least one project ("we had this great project...")

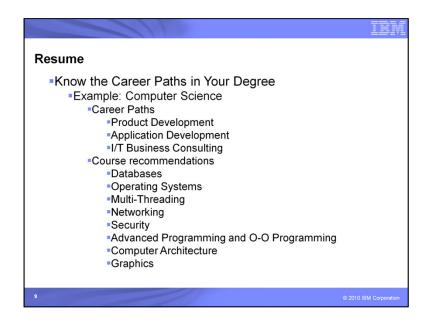
Skills
    List the computer languages (Java, C++)
    Databases (DB2, Oracle, MySQL)
    Design methodologies (AGILE)

Major Design Experience
    Demonstrates multiple skills and is a great talking point
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While your GPA is not the only indicator of your abilities to succeed, it is an important piece of information and belongs on your resume. The GPA is used by recruiters to distinguish between students at the University of Michigan. The extent it is used is up to the individual recruiter or the organization they represent. If the GPA is not on the resume, then the recruiter needs to ask for it. When the resume is passed between managers, it is less likely to be discarded if the GPA is available on the resume.

It is good to list the key CS courses that you have taken on your resume. For each course listed, you should be able to talk about it. If you can describe one project or a few interesting points that you studied in the class, that should be sufficient. It is good to have a Skills section on your resume where you can list the computer languages, databases, operating systems, etc., that you have used or are familiar with.

The Major Design Experience at the University of Michigan is an excellent item for your resume. This project demonstrates teamwork, leadership, and a project that went from design through implementation. The MDE would provide many good talking points for your interview.

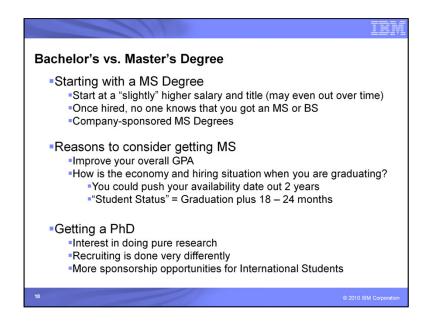


In the Computer Science industry, there are many career paths. There is Product Development in a lab environment which includes Product Design, Quality Assurance (testing), and Customer Support. There is Application Development which can be at a customer shop where you develop applications based on the customer's requirements. And, there is I/T Business Consulting where you may assist the sale's team to advise customers on a company's strategies and product areas.

For Product Development, there is a lot of work in the design of Databases or in the development of tools that interrogate databases. For Application Development, the Database course is also important because customers have many types of data and most applications require interaction with a database system. Most products and applications developed today are complex and involve multi-threading, multi-tasking and parallelism. These are the concepts that are learned in the Operating Systems and Multi-Threading courses. Since most product and application solutions involve some type of connection to the network, the Networking course is important, too, and when products are connected on a network, the study of Security concepts is also very important.

While in college, you will inevitably learn many computer languages and object-oriented concepts. However, to

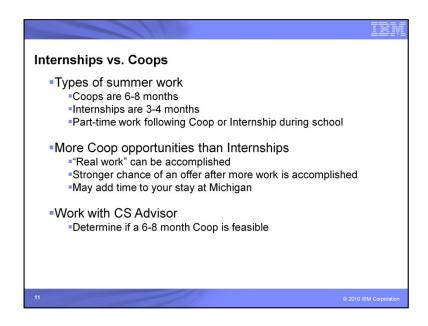
distinguish yourself, it is good to take the Advanced Programming and Object-Oriented Programming courses.



A MS degree is valued by most recruiters over a BS degree. In IBM, a student with a MS degree will start at a higher salary and promotional level. This may even out over time. Once you are working, your degree is unknown to anyone other than your manager. It is assumed that a student with a MS degree starts work with superior knowledge, skills, and work experience and these things will propel the student farther and faster in the company. It can be possible to have a company pay for your MS degree while you are working full-time. A PhD is generally required for doing pure research in IBM. The recruiting of Doctoral students is handled by a differently.

There may be other reasons to consider whether to stay longer in school for a MS degree. If your GPA is not as high as you would like it to be, then you could go back for a MS degree and focus on your grades. Most recruiters will focus their attention on the last degree attained when looking at the GPA. There is another good reason to stay in school and attend Graduate School. The down-turn in the economy is going to tighten the job market. It is certain there are going to be fewer job openings in 2009 than in previous years. Since it takes about 18-24 months (with summer work) to get a MS degree, it may be a very good idea to postpone the job search until there are more job openings. While companies may tighten their hiring in 2009, there will continue to be resource attrition due to normal retirements. This means that when the economy rebounds, it is likely

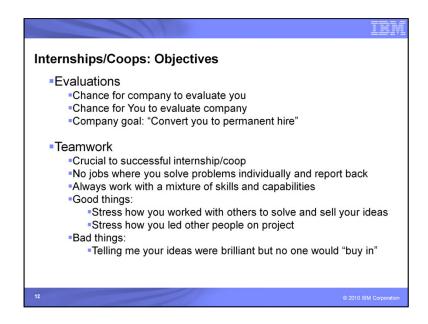
there could be significant opportunities in the job market. This is not a guarantee, but it is worth considering when you are thinking about your specific situation.



There are two types of summer work jobs at many companies. The first is an Internship which typically lasts three to four months and usually begins in May. The exact starting and ending dates can be negotiated with the Hiring Manager. The Coop lasts six to eight months and usually goes between January and August or between May and December. It can be possible to stay on with the company for part-time work during the school year.

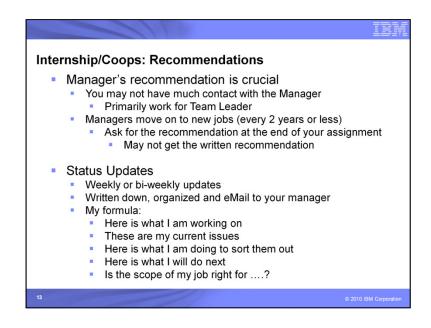
In IBM, there are more Coop positions than Summer internships. The main reason for this is that more work can be accomplished during a Coop than in an Internship. As companies reduce their work forces, managers have looked to Coops to fill in their work force. The downside to doing a Coop is that it adds time to your stay at the University which might be economically infeasible. The upside is that you will have a better chance to distinguish yourself with the company by completing more work and having a longer working relationship with the Hiring Manager.

You can work with your CS Advisor to determine if a Coop position is feasible in your curriculum.



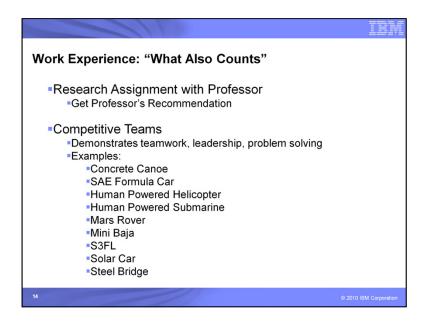
The Internship and Coop is an opportunity for you to evaluate the company and for the company to evaluate you as a potential permanent hire. There are many companies that will have a "percentage goal" of students that will be converted to permanent employees at the conclusion of their assignments.

In most companies, students are required to work with other employees during their work experience. The products are too large and complex to warrant individual assignments with no teamwork. On any given team, there are a variety of skill levels and it is important to be able to work with many types of people. The more you can demonstrate that you can work in a team environment, the better chance you have of doing well in that company. If you can show that you were instrumental in leading the team, that is even better.



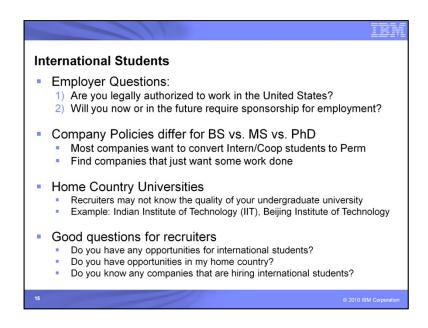
The management recommendation is one of the most important parts of the summer work experience. The manager will decide if you are hired again. It is very common for a summer student to have very little contact with the manager of the group. Within a department, there are usually several Team Leaders and a student will work closely with them. It is a good idea to create opportunities to interact with the manager in a positive way. Managers move from one management position to another management position often as their careers develop. When you are graduating and looking for a job, you may find that the manager is no longer available to give you a recommendation. It is a good idea to ask the manager for a written recommendation when your job has completed. If the company does not allow you to do this, then you can ask for an informal written recommendation from the manager.

I think it is a good idea to provide your manager with a status update either weekly or bi-weekly throughout your Coop or Internship. This written document should include the following information: 1) what you are working on, 2) what you plan to do next, 3) the issues that are currently under investigation, and 4) how you plan to address those issues. These status updates will make it easier for your manager to remember your work so they can assess you. There are other ways to distinguish yourself with your manager and among your peers, but this is a very good one. I recommend that you provide them with both a hardcopy and softcopy status report.



Besides working for a company, there are other ways on campus to demonstrate leadership, improve teamwork, and increase problem solving skills. For instance, you can work with a Professor in your field of study on a research project. A Professor's recommendation on a Research project is good to have at hand.

Additionally, there are Competitive Teams on campus and these are an excellent ways to demonstrate skills, teamwork and leadership. If you have the opportunity to work on one of these projects, it can be highlighted on your resume.



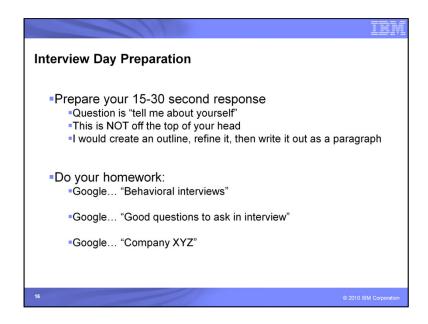
There are two legal questions that are commonly asked by employers to determine visa status. They are:

- 1) Are you legally authorized to work in the United States?
- 2) Will you now or in the future require sponsorship for employment?

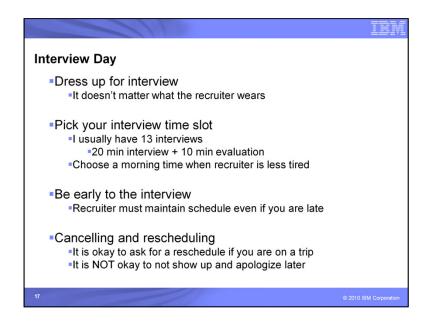
The employer needs to determine if you will require them to sponsor you for a Green Card. The employer's policy on sponsorship may vary for BS, MS, and PhD students. Typically, employers will sponsor students if they in the PhD program while they will have harder requirements for students getting BS and MS degrees. While there is no sponsorship required for summer and coop positions, many employers do not want to hire students on F1 visas because they use the summer/coop program as a feeder program for permanent positions and eventually, they will need to sponsor the student. However, there are other employers who simply want to get some work completed and are not interested in converting the student to a permanent position. Either way, it is not a good idea to "argue" with the recruiter. They have no control over the employer's international hiring policy.

When speaking to recruiters you can ask if they are have any opportunities for international students or if they have any positions available in the home country. It would also be good to ask the recruiter if they know any

companies that are hiring international students.



It is important to do some research on the company prior to the interview. There is a lot of information on the web for every company interviewing at the University of Michigan. You can also talk to company representatives at the Career Fairs. While position descriptions can be vague, they can describe some of the available job openings. It is okay to bring in a few topics that you have read to discuss with the recruiter. However, you should not be surprised if the recruiter is unaware of the topics you bring in. The idea is to impress the recruiter with your interest, but not to "stump" them with superior knowledge of their own company. In many cases, the recruiters are not "technical" people. They may be "people" managers who will rely on their technical people to provide the technical interview at a later date.

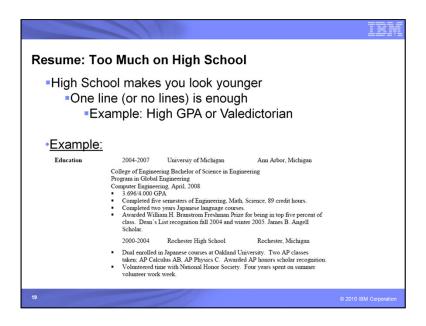


A recruiter can have up to thirteen 30-minute interviews or nine 45-minute interviews in one day. The interviews take 20-30 minutes which leaves about 10 minutes for the recruiter to write up the evaluation before moving on to the next interview. If you have the opportunity to pick your time slot, it is better to pick a morning interview slot because the recruiter is more focused and less tired.

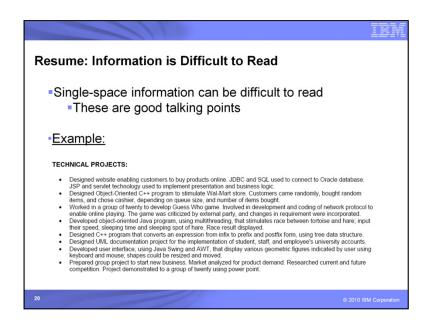
There is a lot of information on interview strategies available on the web. Behavioral interviews have become very popular because they allow recruiters to predict whether a student will be a good team player and will have the ability to work in a corporate setting. It would be good to read about these types of interviews so you can be prepared on the day of the interview. It is good to have one or two good questions to ask the interviewer when they give you the inevitable question, "Do you have any questions for me?" You can find many good questions on the web if you search for "questions for interviewer".



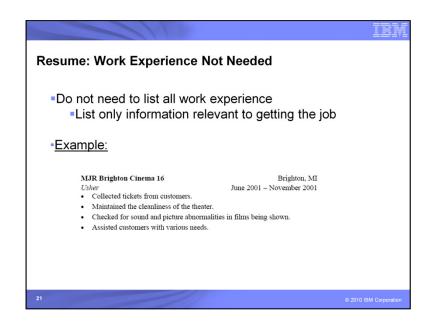
The following section will show a few things to avoid when creating your resume.



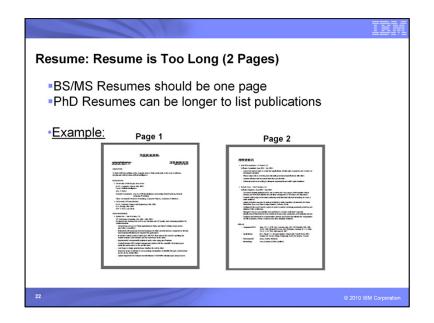
The University of Michigan is a very good school and the students that are accepted have impressive high school credentials. There is a tendency to put too much information about High School in a resume. Unfortunately, this makes the student look younger. Companies recruiting at the University of Michigan know that the students have excellent High School credentials. Your High School qualifications got you accepted by the University of Michigan. It is your college qualifications that will you get you the job. It is okay to put a few specific details about High School in the Awards or Honors section of your resume, but I would avoid listing your High School achievements under the Education section.



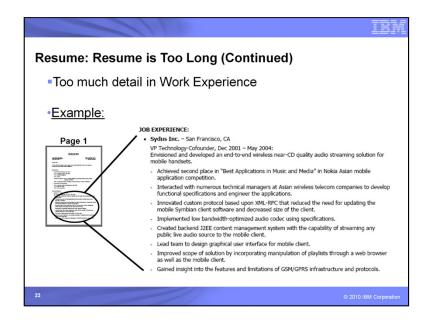
The resume needs to be well-organized and easy to read at a glance. If you have long sentences that are single-spaced, it will be difficult for the recruiter to do this easily. It is better to list your projects with a few bullets and to use the interview time to discuss your projects in greater detail.



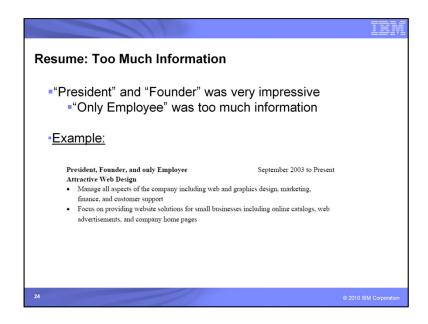
Your resume does not need to show everything you have done in your life. It needs to show only the information that is relevant to the job opening.



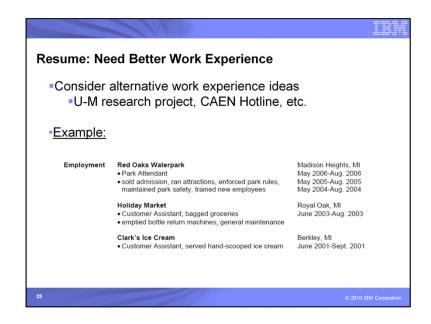
The resume for a BS or MS student should rarely be longer than one page. A PhD student will likely have a resume with multiple pages since they need to show their publications. If a BS or MS student resume is longer than one page, it is usually because there is too much detail or there is information that should not be on the resume.



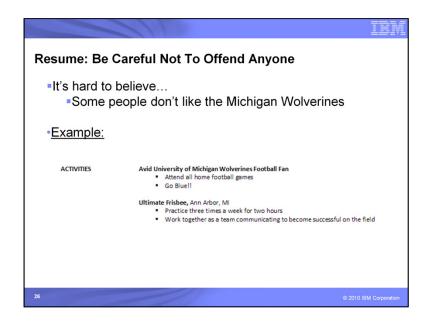
In this example, the student listed too much detail for each summer job.



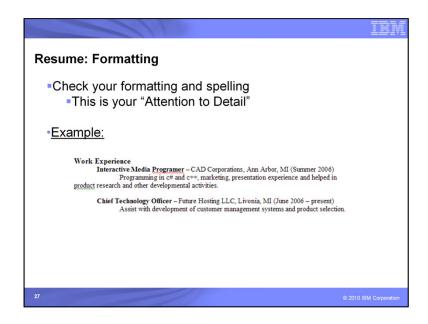
It is important not to put too much information on the resume. In this example, it was impressive to read that this student was the President and the Founder of the company. However, it was less impressive to read that they were the only employee.



The work experience section is important. If possible, you should find jobs that are relevant to your career aspirations. If you can not find a summer job at a company, then you should try to work for the University of Michigan or on a research project with a Professor. You can list university work and research projects in the Work Experience section. The jobs listed on this resume indicate that the student did not have any relevant career work experience.



It is important to avoid information on your resume that could be "offensive" or "distasteful" to the person reading the resume. While it is hard to imagine how anyone could not like the Michigan Wolverines, there are a few unenlightened individuals and they could be the person reading your resume.



It is important to proofread your resume for spelling mistakes and for formatting errors. You need to check how well the resume looks when it is a PDF file, too. These types of errors can be viewed as your "attention to detail".