

# Career in Information Technology (IT)

<insert name>

<insert company>

# Agenda

- My Story
- Why a career in computers
- Suggestions for pursuing
- Resources available to you



# Career in IT

- My story
  - Why did I choose a career IT?
  - What did I do to get a job in information technology?
  - What do I enjoy about my career?
  - How do I spend my time in a typical week?

# Information Technology

What is it?

Information technology (IT) is the application of computers and telecommunications equipment to store, retrieve, transmit and manipulate data, often in the context of a business or other enterprise.



# What are common job titles?

Let's brainstorm...

Analyst  
Programmer  
Data Quality Manager  
Infrastructure  
Project Manager  
Support  
Database Developer  
Database Administrator  
Security Specialist  
Architect  
System Engineer  
Webmaster

Technical Operations Officer  
Java Developer  
Help Desk Specialist  
Computer Systems Manager  
Application Developer  
Information Technology Coordinator  
IT Support Specialist  
.NET Developer  
Director of Technology

# Why Computers?

- Jobs, Jobs, Jobs!
- By the year 2020, it is estimated that there will be 1,000,000 more jobs needed than 4-year Computer Science college graduates

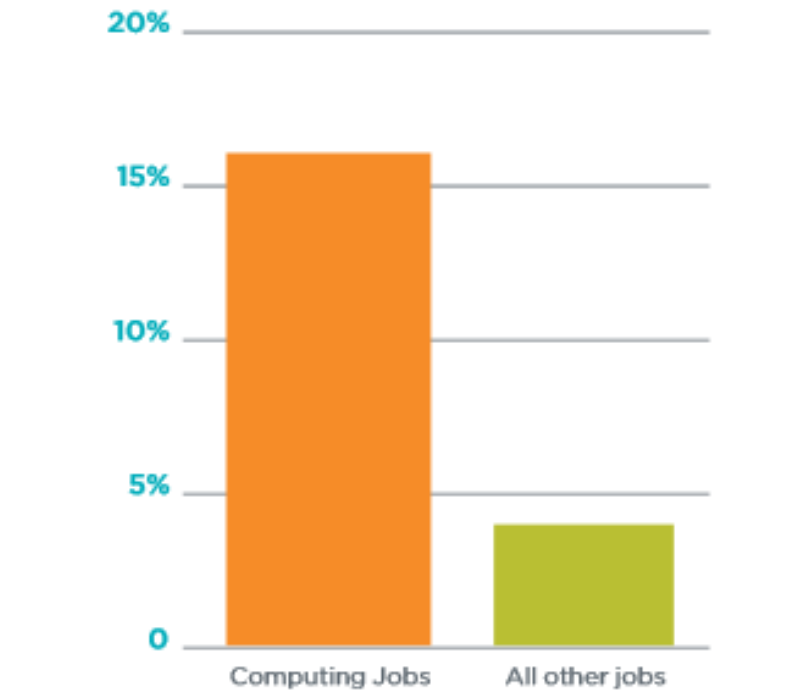
Source: [www.code.org](http://www.code.org) 2015

# Jobs in Minnesota

- In Minnesota, the demand for IT jobs is increasing by 16%, while the demand for all other jobs is increasing by 4%!

## Demand for jobs in Minnesota

Source: Conference Board Help Wanted Online  
Updated Regularly



# Why Computers?

- Not only jobs, but good paying jobs
- 2019 average salary Computer Science 4-year degree
  - \$68,103 (source NACE)
  - Approx. \$34/hour – starting!
- 2019 average salary with a Computer Science 2-year degree
  - \$54,000 (source Payscale)





# Career in Information Technology

- What skills are needed?
  - Problem solving
  - Programming skills
  - Programming is a team sport
    - Teamwork
    - Being a good team member – humility, respect, trust
  - Communication skills
    - Listen to others, share ideas, ask questions



# My IT Example

- My Project and Experience
- My role on the team
- Product
- Challenges
- Outcomes and Areas Improved

# Computer Skills Demand

- National movement to expand participation in computer science - [www.code.org](http://www.code.org)



# How to Pursue a Job in IT

- What can you do now
  - Classes – Computer Programming, Math, Multi-media, Technical Writing, Graphic Design, Web Apps
  - Informational Interviews and Job Shadows
  - Part-time job / Volunteer
  - Develop your own website and/or phone app
  - Post-secondary Enrollment Options (PSEO)
  - Local and On-line Resources
  - Prepare for education beyond high school
- After high school
  - Vocational training
  - College degrees
    - Bachelor (4 year)
    - Associate (2 year)

# What can you do now?

# Online Resources - ISEEK

- ISEEK is Minnesota's comprehensive career, education, and job resource. It is sponsored by Minnesota State Colleges and Universities.
- Includes suggestions for ways to prepare for a career in IT.



Discover. Prepare. Succeed. IT.



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# Online Resources – Free!

- <http://hourofcode.com/us> (part of [www.code.org](http://www.code.org))

## Tutorials for Beginners



The screenshot shows the 'Write your first computer program' tutorial on Code.org. It features a dark grey background with a purple border. On the left, there's a circular area with a photo of Mark Zuckerberg and a red Angry Bird character. Below the photo are two code blocks: 'move forward' and 'turn right 90 degrees'. To the right of the photo is a grid with the text 'ANGRY BIRDS'. On the right side, the text reads: 'Write your first computer program', 'Code.org', 'Learn the basic concepts of Computer Science with drag and drop programming. This is a game-like, self-directed tutorial starring video lectures by Bill Gates, Mark Zuckerberg, Angry Birds and Plants vs. Zombies. Learn repeat-loops, conditionals, and basic algorithms. Available in 34 languages.', 'Ages 4-104 | Modern browsers, smartphones, tablets', '27,624,172 participants', 'Teacher's Notes', and a 'Go' button. At the bottom, there are four colored dots (yellow, purple, purple, purple) and a small squirrel icon.

- [Khan Academy](https://www.khanacademy.org)



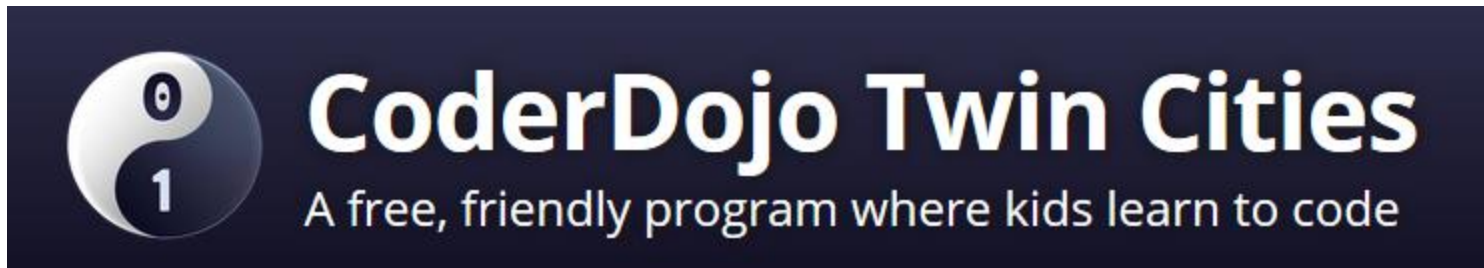
# Twin Cities Resources

- Code Savvy -[www.codesavvy.org](http://www.codesavvy.org)
  - Programs
    - CoderDojo Twin Cities (video – next slide)
    - Technovation Challenge
    - Code Clubs
    - Get with the Program
    - Code Camps for kids
    - Learn to Code
  - Partners
    - Digital Empowerment Academy
    - Katie CoderDojo
    - Tonka CoderDojo
- Genesys Works
  - Trains and employees high school students
- Best Buy Teen Tech Center



# Twin Cities Resources

[www.coderdojotc.org](http://www.coderdojotc.org)



What do the kids think?



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# Twin Cities Resources

Advance IT Minnesota  
([www.advanceitmn.org](http://www.advanceitmn.org))

- More geared to general IT topics versus programming
- Internships
- Cybersecurity Boot Camps
- Women in IT
- IT Discovery Network



# Questions?



# Thank You!

*BestPrep gratefully thanks sdg and other committee volunteers for gathering the content of this PowerPoint to share with students and volunteer guest speakers in Minnesota classrooms.*



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