Comp Sci Rules

Why careers in IT rule

The combination of mobile devices, robotics, internet and social networks have dramatically changed the world more rapidly than any technology change in history

- That combination has already toppled multiple governments
- Altered and/or eliminated multiple industries (book stores, record stores, movie rentals)
- Has forever changed shopping behavior and business to customer relations

Why careers in IT rule

- Mobile
  - 1.5 billion cell phones sold in 2011
  - ~6 billion mobile subscriptions (87% of the worlds population)
  - 8 trillion text messages sent in 2011
  - 300,000 mobile apps developed in the last 3 years
  - More power in the palm of your hand than NASA had when they sent men to the moon

- Social Networks / Internet
  - Facebook ~1 billion users
  - Twitter >500 million users
  - Google:
    - 1 million servers worldwide
    - 24 petabytes (1 quadrillion bytes) of data generated daily

Why careers in IT rule

- **Unique perspective**
  - Universal view of the inner workings of an organization
  - Ability to apply technology for business solutions

- **Unique skills**
  - Ability to understand and solve complex problems
  - Understand how to rapidly develop and deploy technology
  - Understand how to capture and analyze data
  - Understand how to create an excellent user experience across all communication channels with a customer, simultaneously

- **Unique position**
  - Major revolutionary changes will be based on technology
  - Robotics, drones and nanobots will continue to evolve and become more prevalent
    - Successful tests of nanobots delivering drugs to diseased cells have occurred
    - 10,000 drones estimated in the US by 2016
  - Automation of daily activities will continue to evolve (cars and planes will become fully automated, robot vacuum cleaners being mass produced)

You have the education – now create a brand

← Create a personal value statement – example:

"I am a leader, team player, and strategist when it comes to applying technology to business challenges with the end goal of maximizing share holder value"

← Plan to differentiate your brand

◦ Skills and experiences

◦ Business acumen

◦ Awards, volunteer work
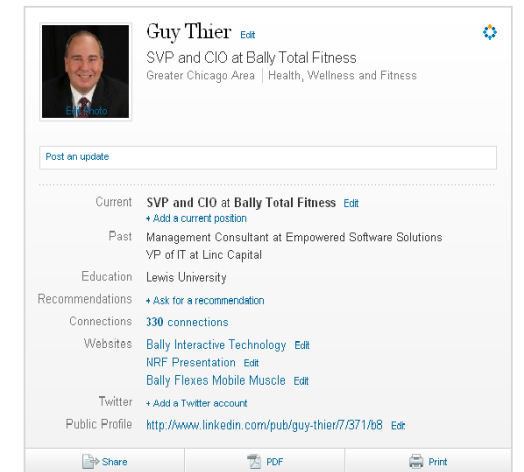
Excerpts from "Me 2.0" by Dan Schawbel

You have the education – now create a brand

◄ Plan to market your brand

- Social media - create a profile everywhere (Facebook, LinkedIn, Google Plus)

- Create a video resume and post it to YouTube and Vimeo

- Use QR Codes on business cards, emails and cover letters to link back to your profile on LinkedIn or Google Plus or to a video resume

- Google yourself and start altering the search results (Twitter, Blogs, publicity)

- No negative advertising

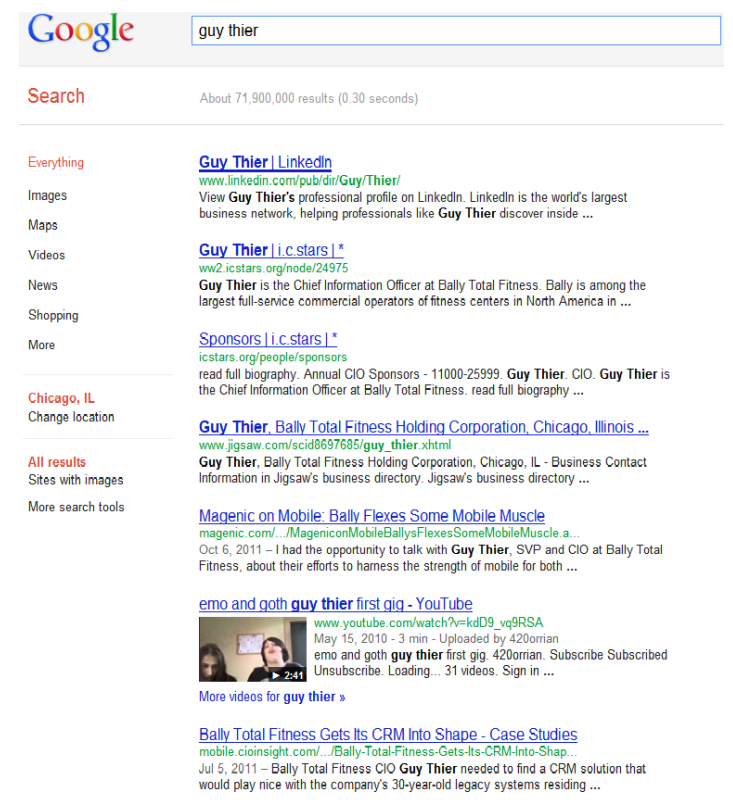Excerpts from "Me 2.0" by Dan Schawbel

You have the education – now create a brand

- Gain confidence in your brand – if you don't believe it, you can't convince somebody else to believe it

- Personal appearance - look the part, even in personal photos online

- Communication skills (written/verbal/listening) – are as important as technical skills

- Technical skills – require a lifelong commitment to keep current

- Create a personal network of relationships to support your brand
  - Co-workers, business associates
  - Online groups
  - Professional organizations

Excerpts from "Me 2.0" by Dan Schawbel

You have your brand set – now get a job

- Recent article states nearly half of recent college graduates work at a job which don't require a degree

- Computer Science is 2nd most attractive degree at 7.9% unemployment

Average salaries for the most popular computer science job titles

Job Title	Salary
Java Developer	$98,000
Software Engineer	$93,000
Project Manager	$93,000
Systems Engineer	$91,000
.net Developer	$91,000
Network Engineer	$91,000
Software Developer	$89,000
Business Analyst	$84,000
Web Developer	$82,000
Systems Administrator	$77,000

*in USD as of Oct 9, 2012
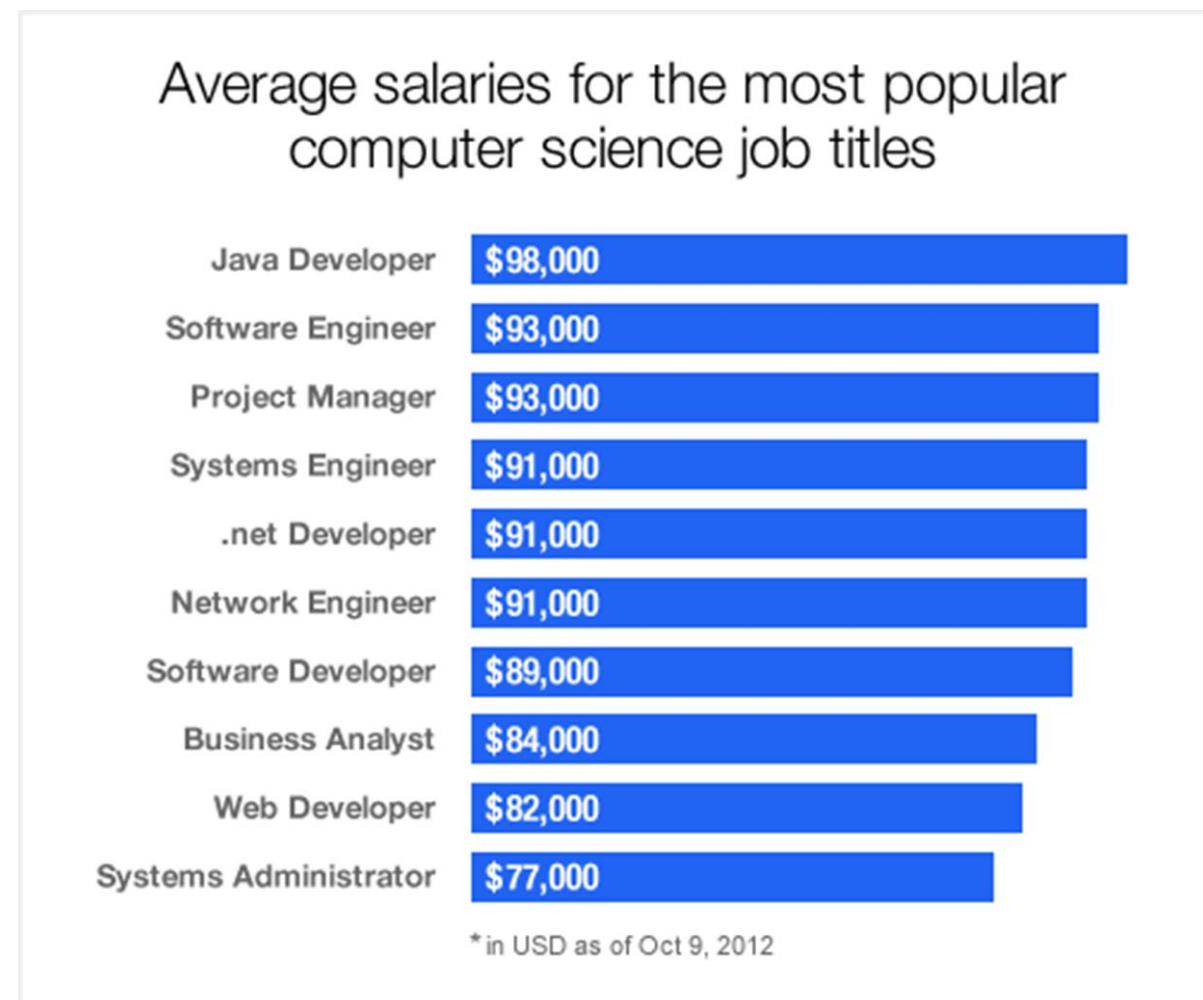
You have your brand set – now get a job

↞Unlike many fields, you have global competition
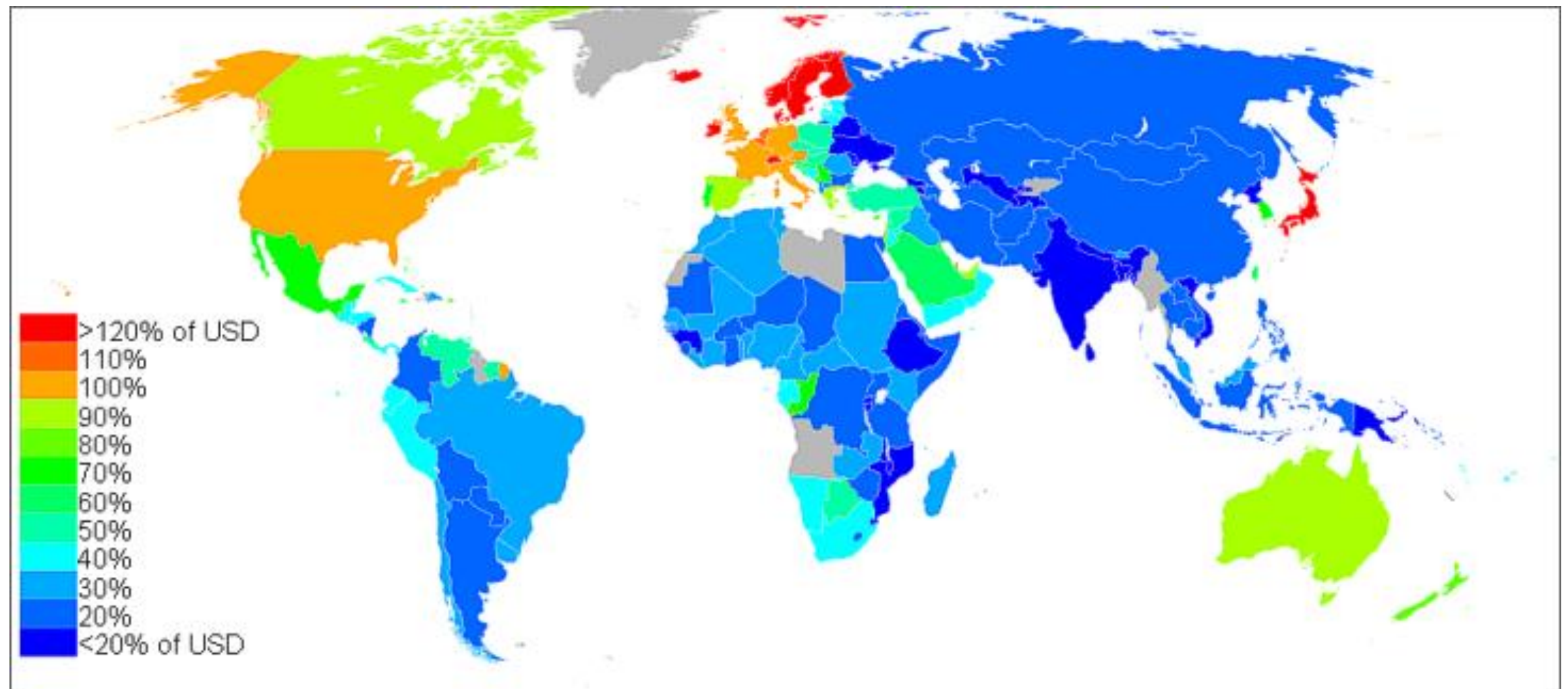
You have your brand set – now get a job

← Software Engineer **average starting** salaries around the world:

- India - $10,300

- China - $13,000

- Russia - $20,000

- US - $55,000

Less than 1 year (699)	$52,421
1-4 years (4004)	$58,289
5-9 years (4195)	$75,125
10-19 years (4153)	$94,294
20 years or more (1830)	$107,194
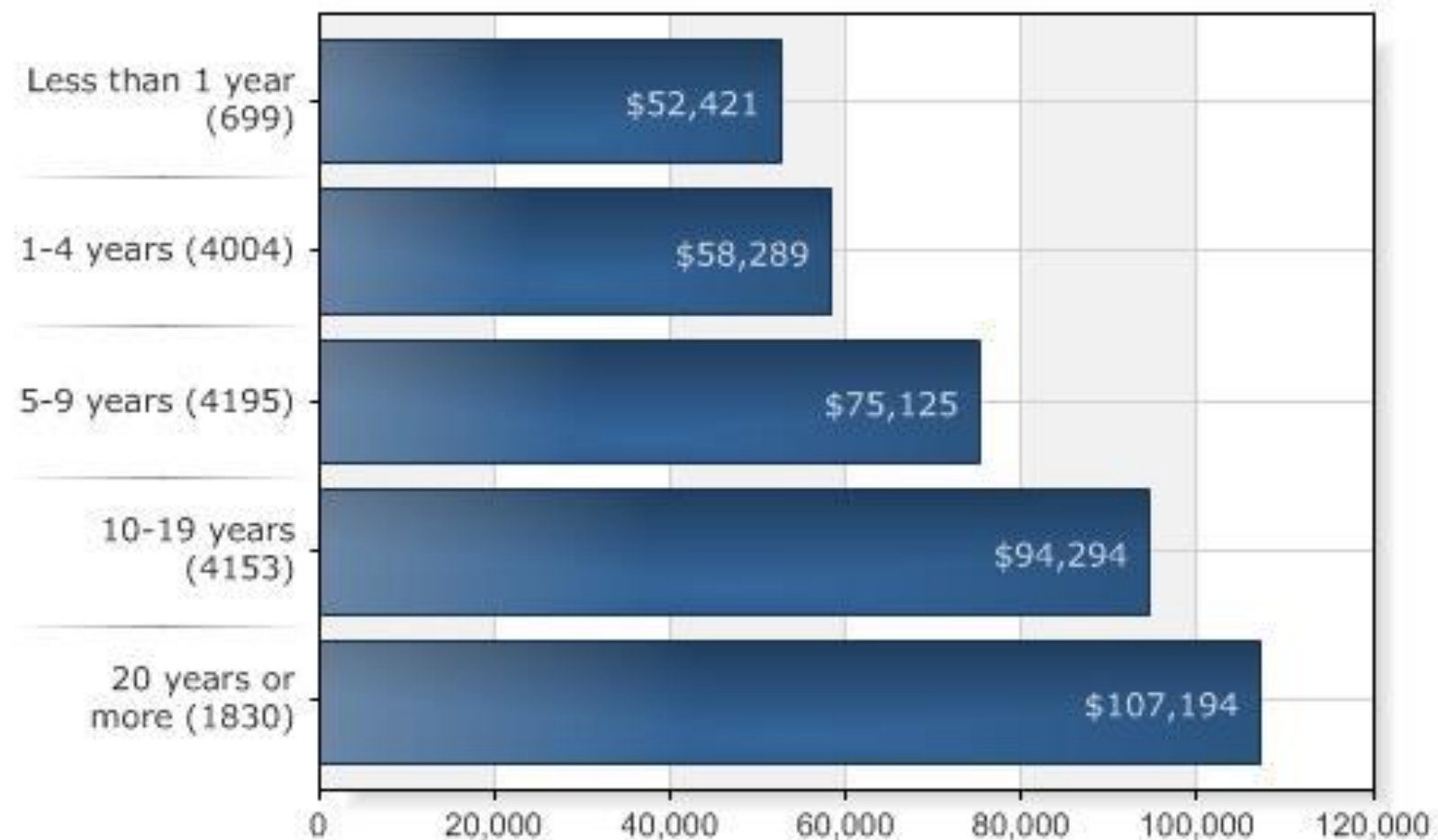
Currency: USD | Updated: 5 Apr 2013 | Individuals Reporting: 14,881

PayScale © PayScale, Inc. @ www.payscale.com

You have your brand set – now get a job

- Skills currently in high demand

  ◦ DBA, Data Architect

  ◦ Data Warehouse, Business Intelligence

  ◦ Cyber Security

  ◦ .Net, Java

  ◦ Mobile development on IOS and Android

- Skills gaining momentum

  ◦ User experience and user interface design

  ◦ Natural interface design (voice- Siri, gesture – Kinect)

  ◦ Context aware computing

  ◦ Social networking for business purposes

  ◦ Robotics / nanobotics

You have your brand set – now get a job

- You must convince a company of two things
  - ◦ You are better than your global competition
  - ◦ You are so much better, that paying you more will yield a better return for a company
- How do you beat the competition
  - ◦ You have the home field advantage – use it
  - ◦ You are an American consumer in the prime demographic of most B2C companies
  - ◦ You should have better communication skills and better business acumen than your global competition

You have your brand set – now get a job

- Your resume must get you an interview

  - Hiring managers spend ~15 seconds reviewing an individual resume

  - Study the job posting and tweak your resume to align with the specific skills being sought

  - Study the company and adjust your resume to highlight a skill or understanding of how the company makes money

  - Questions a hiring manager asks themselves when reviewing a resume:

    - Does this person have the skills I need?

    - Has this person demonstrated good communication (written) skills?

    - Are there any distinguishing (positive/negative) points in the resume?

      - Relevant industry experience

      - Progressive career growth or increased levels of responsibility?

You have your brand set – now get a job

← Your interview must get you an offer

- Do you have the appropriate appearance (professionally dressed, well groomed)?

- Do you demonstrate excitement and enthusiasm to have an interview?

- Do you have acceptable verbal skills?

- Did you do your homework? Do you know anything about your interviewer personally? Do you know anything about the organization?

- Do your questions demonstrate an interest in the organization or the interviewer personally? Do the questions show a 'what will the company do for you' slant?

You have a job – now get a career

← Continue to develop and add to your brand

- Be innovative

- Continue to hone your craft – computer science requires a continuous learning commitment

← Continue to market your brand internally

- Communicate clearly and often

- Positive, 'can do' attitude – do not find excuses for failure, find ways to succeed

- Be truthful – if you must deliver bad news, deliver a solution along with it

You have a job – now get a career

- Show interest in your company – your are a business person with technical skills as opposed to a hired technician

  ◦ Ask good questions

  ◦ Volunteer to work where the company generates money or spends money

- Show you are interested in personal growth and how growth will add value

  ◦ Learning an additional technical skill puts you in a position to work across multiple teams or projects

  ◦ Learning management skills puts you in a position to be a team lead, freeing up your supervisor for other tasks

  ◦ Show loyalty to your supervisor, work to make them look good and make sure they know it

You have a career – now nurture it

- Ultimately it's your career - You need to own it, shape it and find the right fit to keep your career moving forward

- Become invaluable - Become the 'go to' person who always gets the job done

- Become the expert in your field of technical expertise, business process, or support team

- Request feedback on a regular basis – if there is negative feedback, ask how to turn it into something positive

- Be clear on expectations – ask questions and listen to the answers

You have a career – now nurture it

- Learn the strengths and weaknesses of those around you
- You and your co-workers have different personality traits, but need to work together toward common goals
  - 9 Enneagram personality traits to know
    - Reformer – I do everything right
    - Helper – I must help others
    - Motivator – I need to succeed
    - Romantic – I am unique
    - Thinker – I need to understand the world
    - Skeptic – I am affectionate and skeptical
    - Enthusiast – I am happy and open to new things
    - Leader – I must be strong
    - Peacemaker – I am at peace

About the presenter

Guy Thier is a Lewis University Computer Science Alumnus.

His career has led him to a CIO position at a billion dollar company. Guy has hired hundreds of IT professionals during his career, and there are a number of personality traits and skills he looks for during the interview process. You will learn what he looks for when building a team, how he cultivates an innovative culture, and how to differentiate yourself when you enter the job market. Additionally, you will hear an executive's perspective on how the value of an employee is measured and what skills are currently in high demand.   Finally, hear what a global talent pool and an economy slowly recovering from recession means for your career.