

What Happens After College?

Kids with Neurocognitive Disability Working in Engineering and Computing



by Katy Dickinson

(Mom to Paul who has NLD)

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Overview

- Geeks and the Silicon Valley
 - Benefits, Disadvantages
 - Silicon Valley is Geek Central
 - About Software Programmers
 - Intuitive Thinkers
 - Geek Offices and Geek Wear
 - Idiosyncrasy Credit
 - Summary 1
- Getting a Job in the Silicon Valley
 - What Counts in Job Hunting?
 - Getting Experience
 - Interviews
 - Temple Grandin
 - Networking
 - Why Technology?
 - Summary 2
- References



My Son Paul at Age 17
with his sculptures

Benefits	Disadvantages
Largely unaware of peer pressure	Perseverant, stubborn, hard to influence
Amazing ability to concentrate, loves complexity	Gets stuck emotionally – can need help to move on
Generous, loving, and much given to small acts of meaningful kindness	Slow to mature
Believes in long-term commitment, dedicated and loyal	Finds change difficult, finds fast social interactions confusing
Fastidious: seeks structure	Can't organize things without help - homework or papers or his room
Doesn't lie well	Very literal, does not read body language well
Good sense of direction, sequencing, paths	Holds grudges with a very long memory
Loves ritual	Does not take tests well
Good at card and board games because he remembers all of the rule, details of play	Follows all of the rules and expects everyone else to do so

Benefits, Disadvantages of Paul's Disability

Silicon Valley is Geek Central

- **The Geek Syndrome,**
A Popular Concept
- **Geek (from Wikipedia):**
“The word geek is a slang term, noting individuals as ‘a peculiar or otherwise odd person, especially one who is perceived to be overly obsessed with one or more things including those of intellectuality, electronics, etc.’”

About Software Programmers

- “Most of you are familiar with the virtues of a programmer.

There are three, of course:

laziness, impatience, and hubris.”

- Larry Wall

Programmer and author, most widely known for his creation of the *Perl* programming language in 1987



Intuitive Thinkers

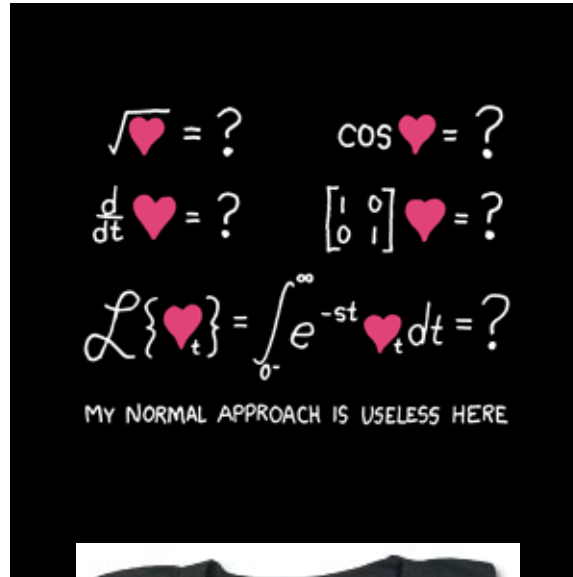
- Engineers are Socially Abnormal
(Statistically Speaking, Of Course!)
- **66% of Engineers are Intuitive Thinkers
on the Myers-Briggs scale:**
 - Their personalities are assessed as rational and pragmatic, they are self-contained problem-solvers
 - Compared to **just 14%** in the Intuitive Thinker personality group in the general population



Geek Offices

Neatness counts at work, but not always in your office, dress, or hair color...





Geek Wear

Idiosyncrasy Credit

- The concept of Idiosyncrasy Credit is part of Silicon Valley culture:
- **“You can be as Strange as you are Good.”**
(a common saying)

Summary 1

- For Engineering staff, the Silicon Valley accepts a broader range of
 - Behavior
 - Dress
 - Office neatness
 - Personality and stylethan is typical of Corporate America.*
- That is, Silicon Valley can be a comfortable place for Geeks.

* To learn what is typical, read Skakoon and King –
The Unwritten Laws of Engineering, 2001

What Counts in Job Hunting?

- **Finding a Job in the Silicon Valley**
- What Counts?
 - Personal Recommendations Count
 - Your academic degree and the university where you were graduated Count
 - Experience Counts
 - Learning fast,
solving problems fast Counts

Getting Experience

- A Way to Get Experience
Before You Get a Job: **Open Source**
- Start with *sourceforge.net*
No pay but many opportunities to learn and show your stuff on small software projects.
- Fix bugs, make tools, optimize, document, create a good reputation in the worldwide technical community.
- Join the global electronic conversation of Engineering and the computing industry.

3 Ways to Get Experience

- **3 More Ways to Get Experience Before You Get a Job:**
- **Internships** - Often three to six months' duration. Can serve as one long job interview. Most Silicon Valley internships are paid. Internships usually happen in college, during summer break, or shortly after graduation.
- **Volunteer projects** - Often office clerical work or low-level programming work (such as creating a web page, database, or set of web tools for a non-profit organization). Learn, create a body of work, earn a good reputation and recommendations. You can volunteer lifelong: during or after college.
- **College jobs** - Start small in a safe environment while still in school. Even office clerical jobs can give excellent experience and contacts. Check with your college's Disability Resource Center (DRC).

Interviews

- **College -> Interview -> Job**
- Almost all jobs require one or many interviews before hire but the unusually talented can be a special case.
- HR (Human Resources) will try to filter in a preliminary interview - to save the manager time. HR is often *very conservative*.
- For those who will probably make a poor impression during an interview, some alternatives:
 - Option #1 - Be introduced: Have someone else speak for you - establishing expectations and context.
 - Option #2 - Let your portfolio speak for you
 - Option #3 - Grow a big job from small projects

Temple Grandin

“Jane Goodall went in the back door to become an ethologist. That’s something I’ve thought about a lot, because people with autism usually have to go in the back door. We have trouble following the normal paths. We don’t do very well in interviews, which is a big problem for us, and a lot of autistic people also have extremely ‘uneven’ academic skills... I couldn’t be doing what I’m doing if there weren’t any back doors.”

- From *Animals Make Us Human*, 2009, by Temple Grandin

Networking

- **Networking - Real and Virtual**
 - Virtual interaction in Second Life (Web-based World)
 - Join a Asperger's Support Group
 - Join a LinkedIn Group for Web-based Social Networking
 - Working from home may not work well - not enough social context for you, or your manager, or co-workers.

Why Technology?

Technology is Fun!

“I, for one, am and will always be a practicing technologist. When denied my minimum daily adult dose of technology, I get grouchy. I believe that technology is fun, especially when computers are involved, a sort of grand game or puzzle with ever so neat parts to fit together...

If the technology you do isn't fun for you, you may wish to seek other employment. Without the fun, none of us would go on.”

Ivan Sutherland, *Technology and Courage*, 1996

- Over 55 patents.
- Computer History Museum Fellow, 2005
- Turing Award, Association for Computing Machinery, 1988
- IEEE John Von Neumann Medal, 1997

Summary 2

- What counts in finding a job?
Recommendations, Academics, Experience, Being Fast.
- Get experience **before** you get a job.
- Get introduced.
- Network.
- Have fun!

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