

# From the trenches

Neil Rhodes

Until recently: Lecturer, UCSD

# Bio

- Undergrad: UCSD (3 years)
- C programmer: Harvard School of Public Health (HSPH) (1 year)
- Unix Systems administrator: HSPH (1 year)
- Grad school: UCSD (3 years)
- Cofounder: Palomar Software (3 years)
- Consulting/Training (15 years)
  - (with a break for:) Software Architect: Palm Inc. (2 months)
- Lecturer: UCSD (2.5 years)
- Software Engineer: Google (3 months and counting)

# Lessons from the trenches

- Keep learning
- Try new things
- Be prepared
- Live within your means
- Make things happen
- Relationships matter

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# Keep learning

- Learn languages
- Read!
- Take classes

# Languages I've studied solely for interest

- C++
- Smalltalk
- Ratfor
- Object Pascal
- Objective C
- Lisp
- Icon
- Scheme
- Ruby
- Haskell
- Erlang
- R
- Python

# Books read (Technical & Business)

- 1996-2005: \$8,429
- 2005-August, 2007: \$1,164
  - plus >100 books from UCSD library
- September, 2007-today
  - 6 books

# Classes I've taken (non-degree)

- First year out of undergrad: Logic programming/Prolog
- Second year out of undergrad: Graduate Databases
- 2004-2005: 3 semesters Spanish
- 2007: Graduate seminar on Metric Embeddings

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# Try new things

- Say yes to opportunity

# Opportunities I've said yes to

- Teaching an undergrad course
- Starting a company
- Teaching a corporate class
- Writing a book
- Lecturing at a conference
- Writing a magazine article

# Opportunities I've sought out

- Grad school
- Job at Apple
- Working with Newton team at Apple
- Working with Palm team at Palm
- Job at Palm
- Teaching at UCSD
- Job at Google

# Opportunities I've left

- Ph.D. program UCSD
- Cofounder: Palomar Software
- Software Architect: Palm Inc.

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# Be prepared

- Internship
- Programming experience
- Test scores
- Grades
- Letters of recommendation
- Plan!
- Get a passport

# Things I didn't prepare as an undergrad

- Internship
- Letters of recommendation
- Grades

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# Live within your means

- Savings/low spend rate gives flexibility
- Max out your 401K
- Learn about investing
  - Rule of 72
  - Read

# Savings/low spend-rate gives flexibility

- Leaving full-time job for grad school
- Leaving grad school for startup
- Years of consulting
- Leaving Palm
- Slowdown/burnout 2001-2005

# Max out your 401K

- Most companies will *match* some portion of your contributions
- Don't give up free money!

# Rule of 72

- With an interest rate of  $x\%$ , your money will double in  $72/x$  years.

# Read

- *The Intelligent Investor* by Ben Graham
- *The Little Book that Beats the Market* by Joel Greenblatt
- *Bogle on Mutual Funds* by John Bogle

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# Make things happen

- If you don't like something, don't just complain, **fix it**
- Better to ask for forgiveness than permission

# Make things happen

- When arrived at grad school, no info for new students
- Co-wrote new student handbook for new grad students
- Had welcome party for new students next year

# Make things happen

- No grad student lounge
  - Bought coffee maker, refrigerator, made Price Club runs
  - Seeds for what is now *Chez Bob*

# Make things happen

- While in grad school, undergrad Data Structures class was taught in C. I thought the brand-new language C++ was a better choice
- Ported C++ compiler to instructional machine
- Taught class in C++

# Make things happen

- Wanted to program the Mac in C++
  - Ported C++ compiler to Mac OS

# Make things happen

- Was going to teach Software Engineering class Winter, 2007, but couldn't figure out how to get needed server software support from ACS
  - Brought in x86 machine from home
  - Installed Buildix (wiki, Trac, Subversion, Cruise Control + Linux all on bootable CD-ROM)
  - Installed Fitness
  - Got static IP and domain name from CSE

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# Relationships matter

- Most work/jobs is through people you know
- The standard approach is not the only approach
- Always leave a good impression on people; you may meet them again

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