

A nighttime photograph of a city skyline, likely Seattle, with numerous illuminated buildings and a prominent church spire on the left. The city lights are reflected in the water in the foreground. A semi-transparent teal rectangle is overlaid on the center of the image, containing the title and speaker information.

From Shell to Swift

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trusource labs

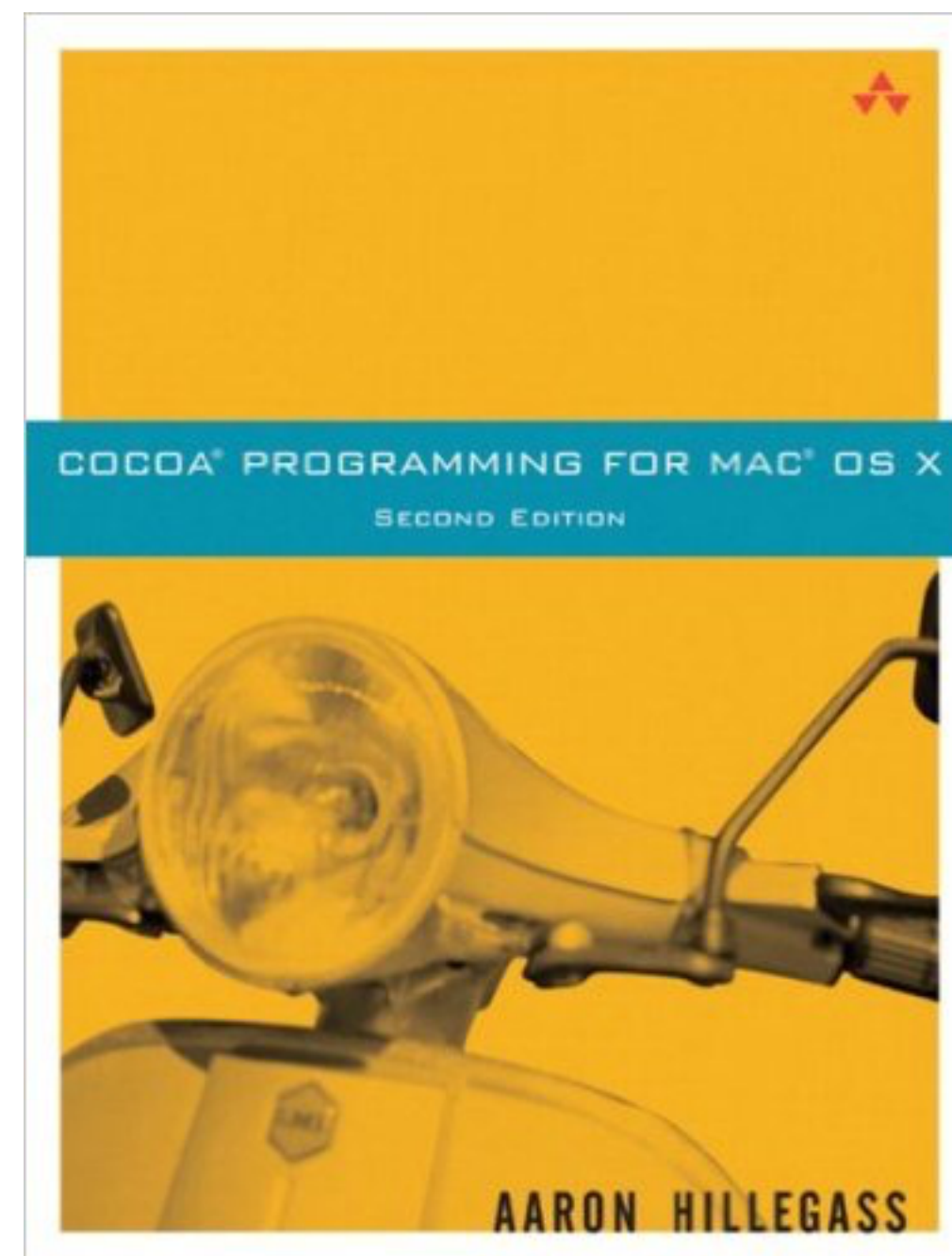
Hello!

I am not a programmer.

I have a journalism
degree.

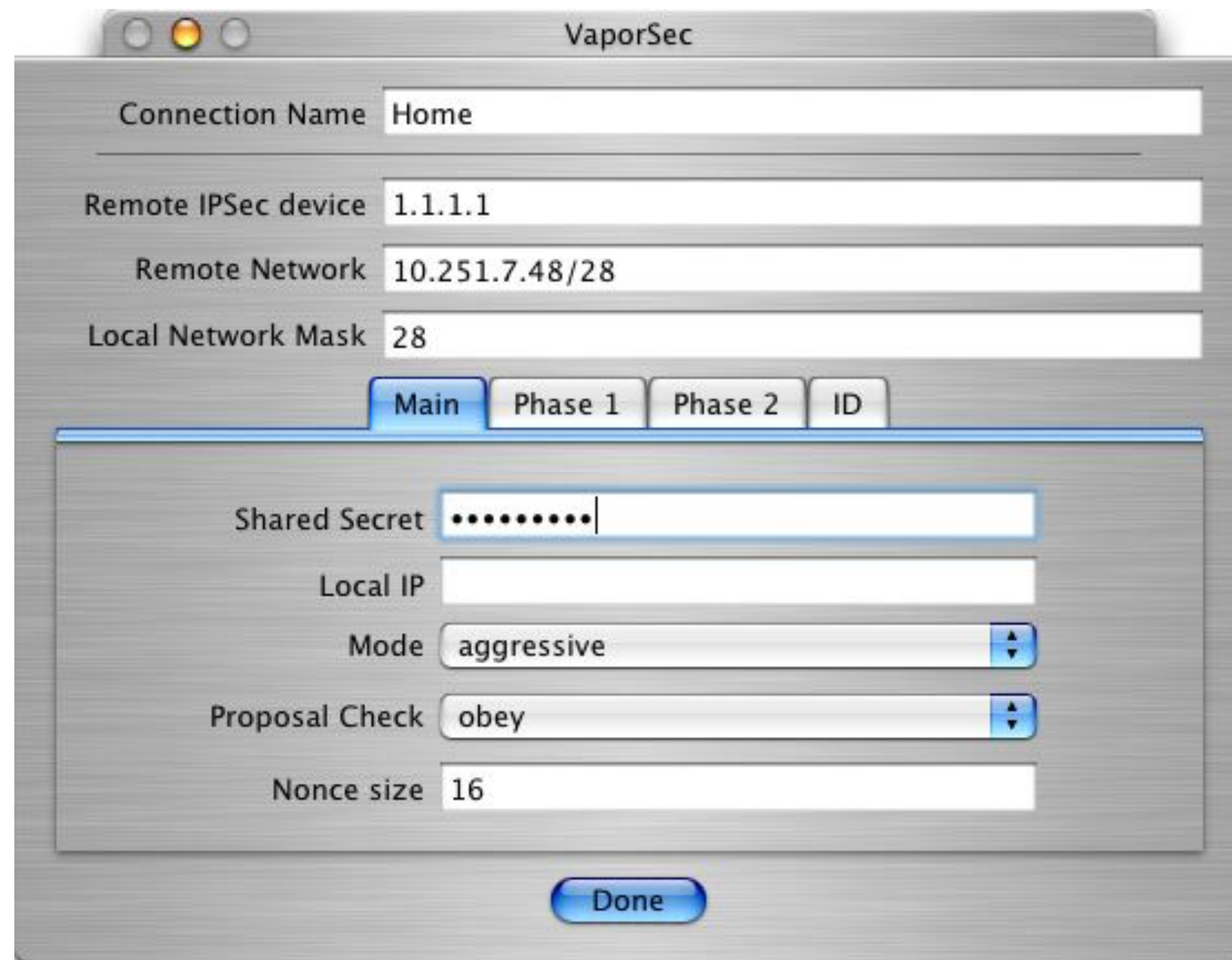
I bought every book on
Objective C.

Even got one signed by
Aaron Hillegass.



Why I like Swift

VaporSec



- IPsec VPN configuration utility
- circa OS X 10.3
- AppleScript Studio GUI with bash "engine"
- twiddled /etc/racoon.conf and other config files
- Juniper listed it as their OS X "client"

InstaDMG

**#!/bin/
bash**

- pre-cursor to AutoDMG and others
- Bash before it was Python
- 1200 lines of Bash in one script
- no GUI

Keychain Minder



- The one before Google wrote theirs...
- Objective-C - but mostly by Googling until it compiled
- Even used a private API!

Swift - Pros



- Supports most “modern” Macs
- Super-easy to learn
- Apple’s future for the next few years
- Lots of API and community support
- Stupidly easy to get into

Swift - Cons



- Can be frustratingly picky - but not quite like AppleScript
- Need to deploy with a Swift runtime... so every “app” will be 6 MB+
- “Dynamic”
- Still young

Swift 3



- Different than Swift 2...
- Less script-like more Objective C-like
- Should be more stable going forward

Swift - For SysAdmins



- Compiled - so it can be easily signed
- Access to system APIs
- Not easily humanly-readable
- Some things are harder.... Other things are much easier than Bash

Något roligt i svenska.



Swift Tips

1

Only read the first 1/3 of
the Swift Language Guide



2

Take an existing Bash/
Shell project and convert
to Swift





Use the playgrounds...
but not too much



4

Be prepared for at least a
little disappointment



4

How Swift Will Annoy You

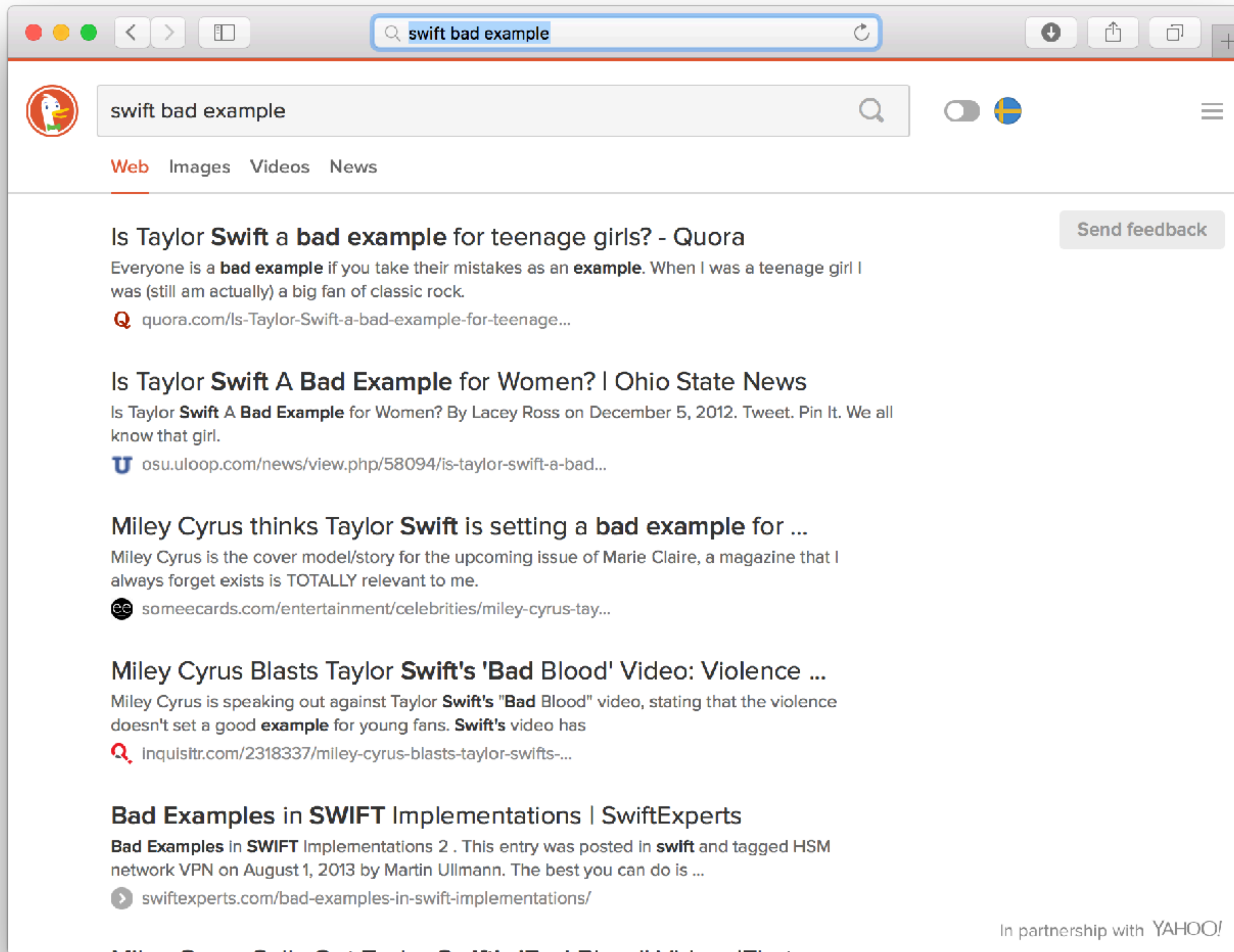
- Asynchrony - your code will no longer be linear
- The deeper you go, the more low-level you'll have to get
- Really really really type safe
- Pointers
- Having to go back to ObjectiveC or shell



4



4



The screenshot shows a web browser window with the address bar containing 'swift bad example'. The search results are displayed on the DuckDuckGo website. The first result is from Quora, titled 'Is Taylor Swift a bad example for teenage girls? - Quora'. The second result is from Ohio State News, titled 'Is Taylor Swift A Bad Example for Women? | Ohio State News'. The third result is from someecards.com, titled 'Miley Cyrus thinks Taylor Swift is setting a bad example for ...'. The fourth result is from Inquisitr.com, titled 'Miley Cyrus Blasts Taylor Swift's 'Bad Blood' Video: Violence ...'. The fifth result is from SwiftExperts, titled 'Bad Examples in SWIFT Implementations | SwiftExperts'. The page also features a 'Send feedback' button and a 'In partnership with YAHOO!' logo.

swift bad example

Web Images Videos News

Is Taylor **Swift** a **bad example** for teenage girls? - Quora

Everyone is a **bad example** if you take their mistakes as an **example**. When I was a teenage girl I was (still am actually) a big fan of classic rock.

quora.com/Is-Taylor-Swift-a-bad-example-for-teenage...

Is Taylor **Swift** A **Bad Example** for Women? | Ohio State News

Is Taylor **Swift** A **Bad Example** for Women? By Lacey Ross on December 5, 2012. Tweet. Pin It. We all know that girl.

osu.uloop.com/news/view.php/58094/is-taylor-swift-a-bad...

Miley Cyrus thinks Taylor **Swift** is setting a **bad example** for ...

Miley Cyrus is the cover model/story for the upcoming issue of Marie Claire, a magazine that I always forget exists is TOTALLY relevant to me.

someecards.com/entertainment/celebrities/miley-cyrus-tay...

Miley Cyrus Blasts Taylor **Swift's** 'Bad Blood' Video: Violence ...

Miley Cyrus is speaking out against Taylor **Swift's** "Bad Blood" video, stating that the violence doesn't set a good **example** for young fans. **Swift's** video has

inquisitr.com/2318337/miley-cyrus-blasts-taylor-swifts-...

Bad Examples in **SWIFT** Implementations | SwiftExperts

Bad Examples in **SWIFT** Implementations 2 . This entry was posted in **swift** and tagged HSM network VPN on August 1, 2013 by Martin Ullmann. The best you can do is ...

swiftexperts.com/bad-examples-in-swift-implementations/

In partnership with YAHOO!



Jotain hauskaa ruotsiksi.



Some Examples



How to use the Playground



1

```
sample.bash — MacSysAdmin2016

1  #!/bin/bash
2
3  # Some script to do some things
4
5  # First find out who's logged in
6
7  currentUser=`ls -l /dev/console | awk '{print $3}'`
8
9  if [ "$currentUser" = "root" ]; then
10     echo "<result>${code1ID}</result>"
11     exit
12 fi
13
14 MY_HOST_UP=`ping -c 3 www.apple.com`
15
16 if [ `echo "$MY_HOST_UP" | grep round-trip | wc -l` ]; then
17     echo "Found it!"
18 else
19     echo "Can't Connect!"
20 fi
```

Line: 14:32 | Shell Script (Bash) | Tab Size: 4





Fun with NSTask()



2

uhh... fun with Process()





<http://www.gitlab.com/mactroll/swiftbits>



Creating a project





What I'm using Swift for



Casper User Setup



- Wrapper around QuickAdd.pkg
- Like DEP, but not DEP
- Queries JSS for valid groups, creates a placeholder account, then adds the Mac to the group
- Leverages the JSS API

Casper User Setup

User Setup

Full Name

Joel Rennich

AD User

jrennich

e-mail Address

jrennich@trusourcelabs.com

DEP-General

Ready.

Setup Account





Showing at JNUC 2016

NoMAD



- Everything you like about AD... without the bind
- SSO, password expiration warnings, password changes, local password sync, Windows CA certificates
- Manageable via profiles/MDM
- Simple and customizable

NoMAD



Other session:
Wed. @ 11.20

NoMAD

November
Release





#nomad on macadmins.org Slack

<http://www.gitlab.com/mactroll/nomad>

Thanks