

From Rabbi To Coder

Preparing For The Technical Interview

Ben Greenberg ([@rabbigreenberg](#))

 [@rabbigreenberg](#)  reactiverabbi.io

Where It All Began

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

San Diego Ca



[@rabbigreenberg](https://twitter.com/rabbigreenberg)



reactiverabbi.io

SD 2600 People

[skalore](#) - Founder of San Diego 2600, UNIX administration, coding

[h1kari](#) - Co-founder of San Diego 2600, Chairman of ToorCon

[Pixel8](#) - Graphics / Founder of PixelTwisters.

[KiWe](#) - WarDriving wheelman and group cheerleader

[nfiltr8](#) - Dachb0den Labs Engineer

[ComLogik](#) - Corporate Diagnostics, Telephony & Network Auditing

[Fortezza](#) - Phreaking and Trashing

[\[Main Page\]](#) [\[Photos\]](#) [\[Disclaimer\]](#) [\[Directions\]](#)

What is 2600?

2600 is a hacker quarterly magazine founded and edited by Eric Corley aka Emmanuel Goldstein. It has been around since the early 80s, and has worked for the hacker ideal of ethical hacking. Click here to see their official [website](#).

What is San Diego 2600?

San Diego 2600 is an auxillary of 2600 Magazine. We are an outlet of 2600 in the Greater San Diego area. Our meeting like all 2600 Meetings is the first Friday of every month at 5pm. The SD2600 meeting is located at an excellent pizzeria called [Leucadias](#) (out on the patio) or at the mexican restaurant across the street if the patio is filled. Leucadias and the mexican restaurant is located on Regents Road in the Vons Shopping Center. The meetings serve as a place to hang out, meet the people you talk with online, discuss the latest technological advancements or hacker issues, and trade ideas.

San Diego's own ToorCon was a success!

September 30 2001

ToorCon 2001 went off without a hitch. Make sure to visit the [ToorCon](#) site soon for updates and photos.

Added Security News Network from @Stake

June 27 2001

Using html provided by @Stake we now have regularly updated news links from SNN1 - The Voice of Reason

The San Diego 2600 WebSite gets a facelift!

June 5 2001

Pixel8, updated the site from his old design.

The Union Tribune Investigates San Diego 2600

August 31 1999

Consider the locksmith.

He's an expert in security -- how to bolster it, how to thwart it. In his knowledge of locks....[more](#)

Official Press Release from San Diego 2600

June 31 1999

Dear San Diego News Agencies, San Diego 2600 would like to add a different perspective to the recent hacker crackdown....[more](#)

Essential WebLinks

News Sites

- [@Stake](#)
- [Attrition](#)
- [The Intelligence](#)

Network

- [CNN](#)
- [San Diego Union Tribune](#)
- [Nightfall Security Group](#)
- [Slashdot](#)

Technology Sites

- [Freedom Software - Protect Your Privacy Now!](#)
- [FreeBSD](#)
- [Slackware](#)
- [San Diego Supercomputer Center](#)
- [Freshmeat](#)

"Hacker"/"Hacking" Sites

- [Nightfall Security Group](#)
- [2600 - The Hacker Quarterly](#)
- [Las Angeles 2600](#)

Conventions

- [ToorCon Computer Security Expo](#)
- [Defcon](#)
- [Hope2000](#)
- [USENIX](#)
- [COMDEX](#)

[Mail us your ad!](#)



@rabbigreenberg



reactiverabbi.io



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

From: skalore () SD2600 NET (Ben)
Date: Tue, 13 Jul 1999 15:42:36 -0700

ToorCon - San Diego, California's ONLY Comprehensive Computer Security Conference

WHEN

September 3rd-4th, 1999
Each day starts at 10am and ends at 6pm

WHERE

The Price Center in the University of California, San Diego:
9500 Gilman Drive
La Jolla, CA 92093

WHO

ToorCon is sponsored by the San Diego 2600 Meeting (sd2600.net) and Nightfall Security Group (nfsg.org).

WHY

The purpose of ToorCon is to bring a comprehensive, interactive and enjoyable conference to the western United States that will help make the public aware of the importance of computer security and how to make their networks more secure. We will try to cover more general issues such as hackers and crackers and how the media uses it's role in the computer world but we are going to focus toward specific issues of computer security such as IDS, firewalling, buffer overflows, etc.

PRICE

ToorCon is \$35 at the door for both days. If you live in the San Diego area, or wish to pay in advance for large companies please contact me at skalore () sd2600 net and we can arrange to pay in advance for \$25 per person.

REFERENCES

ToorCon Website is <http://toor.sd2600.net>
San Diego 2600 Meeting Website is <http://www.sd2600.net>
Nightfall Security Group is <http://www.nfsg.org>



@rabbigreenberg  **reactiverabbi.io**

and then...

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io





 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io



COVER STORIES



H is for Hacker

Computer outlaws at downtown San Diego  Bristol Hotel 

By Jeanne Schinto, June 19, 2003

"... my mind wandered off to Ben Greenberg.

 **@rabbigreenberg**  **reactiverabbi.io**

Had he really gone to rabbinical school...?

 **@rabbigreenberg**  **reactiverabbi.io**

***Maybe he
hadn't.***

 **@rabbigreenberg**  **reactiverabbi.io**



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

What I Was Actually Doing

 @rabbigreenberg  reactiverabbi.io



@rabbigreenberg



reactiverabbi.io

Fast Forward 10 Years...

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io



FLATIRON SCHOOL



[@rabbigreenberg](https://twitter.com/rabbigreenberg)



reactiverabbi.io

Graphic Designers

 @rabbigreenberg  reactiverabbi.io

Musicians

 @rabbigreenberg  reactiverabbi.io

Artists

 @rabbigreenberg  reactiverabbi.io

Teachers

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Lawyers

 @rabbigreenberg  reactiverabbi.io

Salespeople

 @rabbigreenberg  reactiverabbi.io

and yes...

 **@rabbigreenberg**  **reactiverabbi.io**

Rabbis

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

We Transitioned To Coding Because...

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Ability to Create

 @rabbigreenberg  reactiverabbi.io

Jobs

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Excitement of Learning

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Jobs

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Ability to Make an Impact

 @rabbigreenberg  reactiverabbi.io

Jobs

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Remote Work Culture

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Jobs

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Did I mention...

 **@rabbigreenberg**  **reactiverabbi.io**

Jobs?

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

First Comes The Learning

 @rabbigreenberg  reactiverabbi.io

Then Comes The Resume

 @rabbigreenberg  reactiverabbi.io

**Then Comes
The...**

 **@rabbigreenberg**  **reactiverabbi.io**



@rabbigreenberg



reactiverabbi.io



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

How Do We Turn This

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

To This

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

What We're Going To Do:



1. Some Principles
2. Apply Them To An Example

Principle #1:

Know Your Strengths



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Which One Makes More Sense To You?

 **@rabbigreenberg**  **reactiverabbi.io**

$$\overline{A \cup B} = \bar{A} \cap \bar{B},$$

$$\overline{A \cap B} = \bar{A} \cup \bar{B}$$

or

 **@rabbigreenberg**  **reactiverabbi.io**

***the negation of a disjunction is the
conjunction of the negations;
and
the negation of a conjunction is the
disjunction of the negations;***
(source: Wikipedia on De Morgan's Laws)

(It's okay, if neither made sense) 😲

 **@rabbigreenberg**  **reactiverabbi.io**

Technically Minded People:

Limit # of Words

 **@rabbigreenberg**  **reactiverabbi.io**

Liberal Arts People:

How can I make one word into a sentence?

How can I make one sentence into a paragraph?

How can I make one paragraph into an essay?

How can I make one essay into a dissertation?

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Principle #2:

Every Building Starts With The First Brick



Big

**ideas can be broken down to a collection of smaller ideas
Smaller ideas can be broken down to even smaller collection of ideas
and those ideas can be broken down to an even smaller collection of ideas...**

 **@rabbigreenberg**  **reactiverabbi.io**

Principle #3:

Interviewing Is Iterative



@rabbigreenberg



reactiverabbi.io

***The wisest of people said, “A righteous person falls seven times, but rises again.”
...the knowledgeable are aware that the essence of the righteous person's rising again is because of their seven falls***

— Rabbi Yitzhak Hutner



@rabbigreenberg



reactiverabbi.io

WIN — AT — LOSING



How Our Biggest
Setbacks Can Lead to
Our Greatest Gains

SAM WEINMAN



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

An Example:

Binary Search

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Applying Principle #1: Know Your Strengths

 @rabbigreenberg  reactiverabbi.io

Binary Search

"one or the other" search

a method of searching in one or other place.

What is this similar to?

 @rabbigreenberg  reactiverabbi.io



 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Applying Principle #2: One Brick At A Time 🧑‍🔧

🐦 @rabbigreenberg 🌐 reactiverabbi.io

Simple English:

- 1 An ordered list
- 2 This list is split into two
- 3 I have a desired value

In which section is my desired value closer to?

- 4 Look through that section

Is is there?

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Yes?

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io



[@rabbigreenberg](https://twitter.com/rabbigreenberg)



reactiverabbi.io

No?

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

**At least we can eliminate a range of values
that we know it's not in**

Let's Make Two New Sections...

 **@rabbigreenberg**  **reactiverabbi.io**



until...

 **@rabbigreenberg**  **reactiverabbi.io**

We Found It!

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io



[@rabbigreenberg](https://twitter.com/rabbigreenberg)



reactiverabbi.io

Applying Principle #3: Interviewing Is Iterative

 @rabbigreenberg  reactiverabbi.io

Binary Search

Take One:

 @rabbigreenberg  reactiverabbi.io

Binary Search

Take One:

```
function binarySearch(items, value) {  
  
}
```

Binary Search

Take One:

```
function binarySearch(items, value) {  
    let first = 0,  
        last = items.length - 1,  
        middle = Math.floor((last + first)/2);  
}
```

Binary Search

Take One:

```
function binarySearch(items, value) {
    let first = 0,
        last = items.length - 1,
        middle = Math.floor((last + first)/2);

    while(items[middle] !== value && first < last) {
        if (value < items[middle]) {
            last = middle - 1;
        }
        else if (value > items[middle]) {
            first = middle + 1;
        }
        middle = Math.floor((last + first)/2);
    }
    return (items[middle] !== value) ? -1 : middle;
}
```



Can We Make That Better?

 **@rabbigreenberg**  **reactiverabbi.io**

Yes We Can!

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Binary Search

Take Two:

```
const binarySearch = (items, value) => {
  let first = 0, last = items.length - 1, middle = ((last + first)/2) | 0;

  if (value < items[first] || value > items[last]) return -1

  while(items[middle] !== value && first < last) {
    value < items[middle] ? last = middle - 1 : first = middle + 1
    middle = ((last + first)/2) | 0;
  }
  return (items[middle] !== value) ? -1 : middle;
}
```



Can We Make That Better?

 **@rabbigreenberg**  **reactiverabbi.io**

Yes We Can!

**but we'll stop here for the sake of time,
but we could keep on going because...**

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Interviewing

 @rabbigreenberg  reactiverabbi.io

Coding

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Learning

 @rabbigreenberg  reactiverabbi.io

Growing

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Living

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

is

Iterative

(Principle #3: )



@rabbigreenberg



reactiverabbi.io

To Recap

 [@rabbigreenberg](https://twitter.com/rabbigreenberg)  reactiverabbi.io

Three Principles

 @rabbigreenberg  reactiverabbi.io

1

Know What Your   Is

 **@rabbigreenberg**  **reactiverabbi.io**

2

Take The 🏢 Apart One 🏗️ At a Time

🐦 @rabbigreenberg 🌐 reactiverabbi.io

3

 **Rinse** → **Wash** → **Repeat** 

 **@rabbigreenberg**  **reactiverabbi.io**



לא עָלֶיךָ הַמְלָאכָה לְגִמּוֹר, וְלֹא
אַתָּה בְּוֹ חוֹרִין לְבַטֵּל מִמְּנָה

***It is not your
responsibility to
finish the work, but
neither are you free
to desist from it.***

-- Ethics of the Sages 2:16

200 BCE - 200 CE



@rabbigreenberg



reactiverabbi.io

THANK YOU!

Please be in touch:

@rabbigreenberg || reactiverabbi.io

 **@rabbigreenberg**  **reactiverabbi.io**