Presentation and Oral Communication Skills

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Welcome!

Always greet your audience and tell them you are honored to talk to them!

Why do presentation skills matter?

Communicating well makes you happy

Inspires others to give you capital

attention, pointers, funding, collaboration, ideas, jobs, financing, etc.

You will explain ideas, techniques, and results your entire life

Formally and informally in your personal & professional relationships, at conferences, in interviews, in classrooms, with colleagues

WHAT IS YOUR HOOK?

Programming the Internet of Uncertain <T>hings

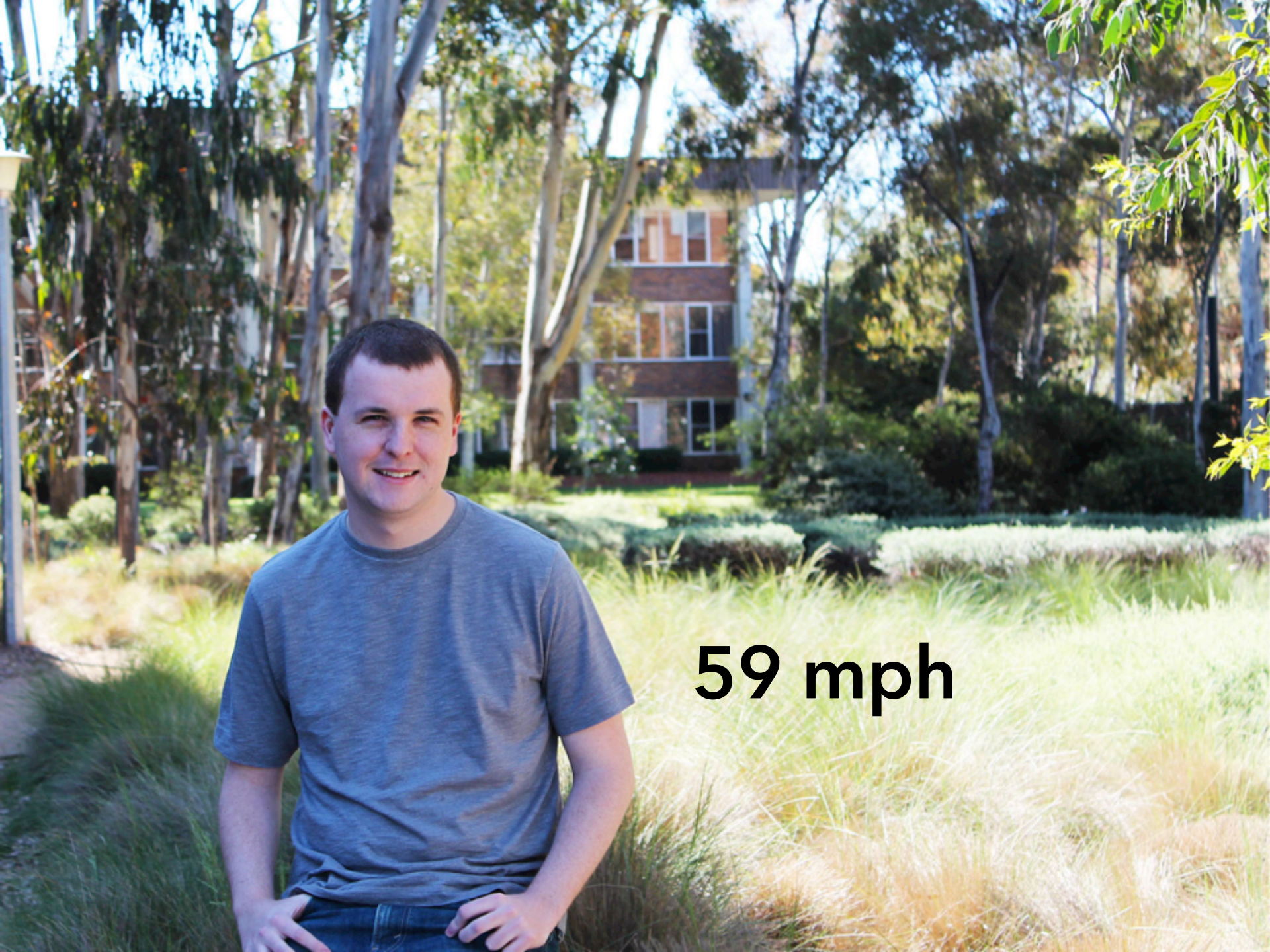|	
James Bornholt	University of Washington
Na Meng	University of Texas at Austin
Todd Mytkowicz	Microsoft Research
Kathryn S. McKinley	Microsoft Research

24 mph

59 mph

```
GeoCoordinate PrevLocn = Get();
Sleep(5);
GeoCoordinate Location = Get();
```

```
GeoCoordinate PrevLocn = Get();
Sleep(5);
GeoCoordinate Location = Get();
double Dist =
            Distance(PrevLocn, Location);
double Speed = Dist / 5;
```

```
GeoCoordinate PrevLocn = Get();
Sleep(5);
GeoCoordinate Location = Get();
double Dist =
              Distance(PrevLocn, Location);
double Speed = Dist / 5;

if (Speed > 4)
    Print(Speed);
```

59 mph
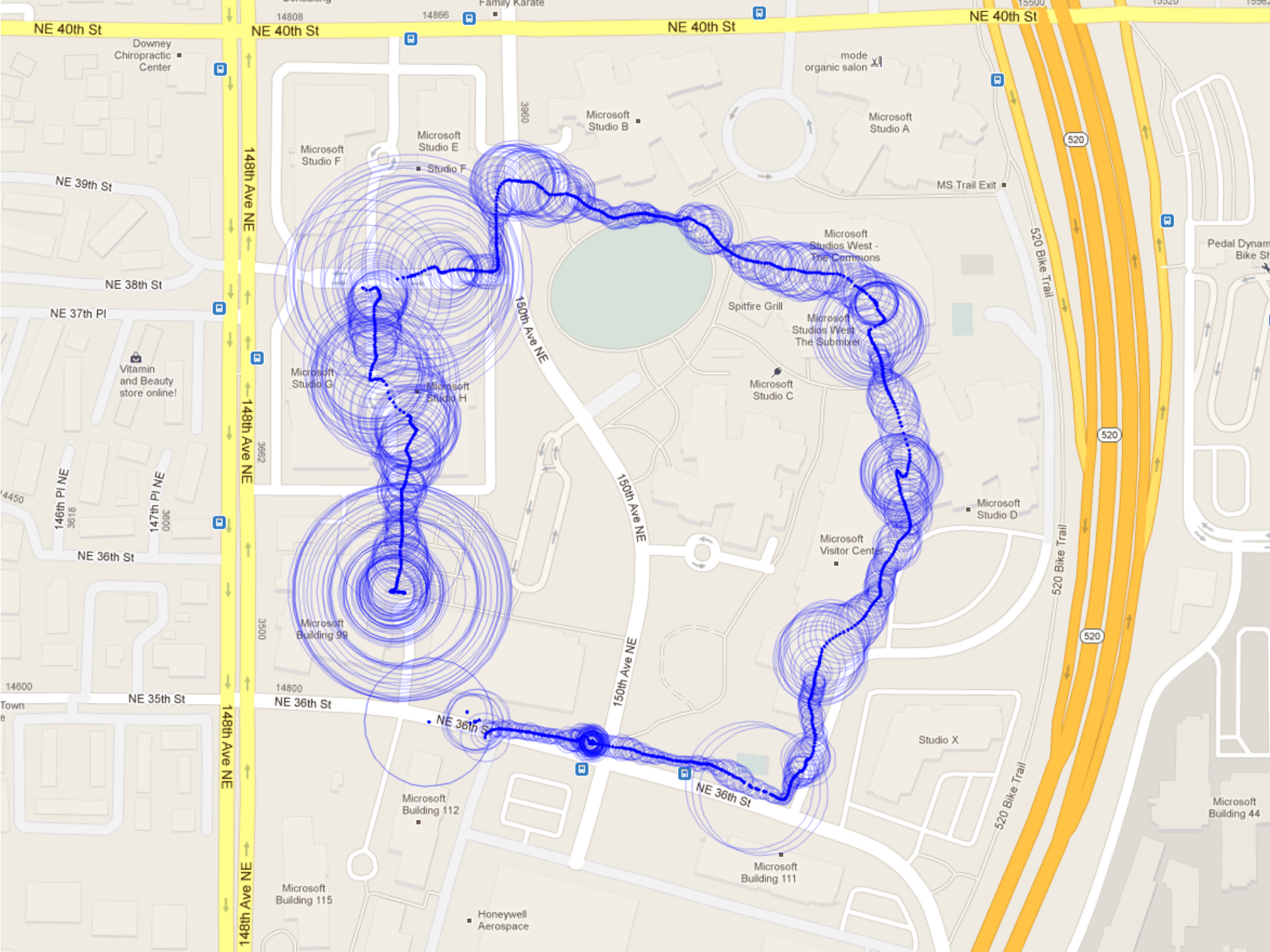
```
Uncertain<GeoCoordinate> PrevLocn = Get();
Sleep(5);
Uncertain<GeoCoordinate> Location = Get();
Uncertain<double> Dist =
                Distance(PrevLocn, Location);
Uncertain<double> Speed = Dist / 5;

if (Speed > 4)
    Alert("Keep it up!");
```

86% fewer errors

What's the point of a hook?

Grabs your audience's attention

Peaks audience interest

What's the point of your talk?

Learn from the best

Ayanna Howard

Who inspires you and why?

Ted Talks --- Amy Cuddy

"Your body language shapes who you are"

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One minute exercise

On a scale of 1 to 10,
how confident do you feel right now?

Please stand and put your hands on your hips

One minute exercise

On a scale of 1 to 10,
how confident do you feel right now?

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Next

Knowing your constraints

Elements of style

Question & answer

Feel free to ask questions

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Analyze your constraints

Audience

What do they know?

Why are they here?

Biases?

Occasion

Time

Size

Purpose

To inform

To teach

To persuade

To inspire

Analyze your constraints

Audience

What do they know?

Why are they here?

Biases?

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Seize your opportunities!

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Elements of Style

Structure

Visual aids

Speech vs words on your slides

Delivery

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Structure

Hook

Context setting

Talklets

    point 1, point 2, … point k

    summary

The end

Context setting

Define problem

Significance

Background

Related Work– Version I
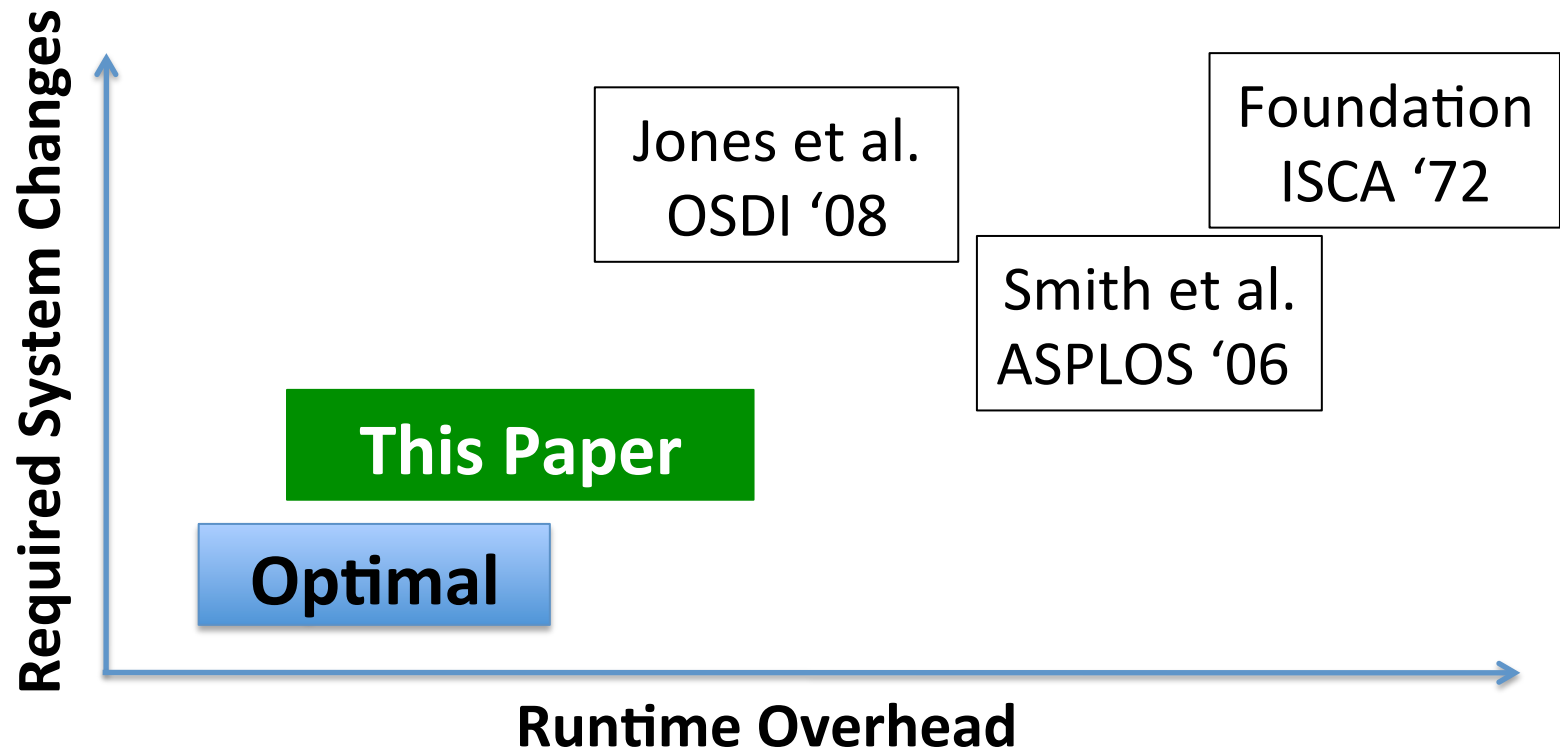
"A reasonable approach to page coloring"

ASPLOS '06

"Another page coloring idea"

OSDI '08

"Yet another page coloring idea"

ASPLOS '07

Related Work– Version II

Required System Changes

Jones et al.
OSDI '08

Foundation
ISCA '72

Smith et al.
ASPLOS '06

This Paper

Optimal

Runtime Overhead

Spatial design space display highlights novelty

Middle

Don't be afraid of technical depth

But… make it understandable

Typically requires new visual materials compared to your reference material

Re-coloring Procedure – Version I

Quick search for *K*-th hottest page's hotness

Bin[i][j] indicates # of pages in color *i* with normalized hotness in

[*j, j+1*] range

procedure *Recolor*

   budget (recoloring budget)

   old-colors (thread's color set under old partition)

   new-colors (thread's color set under new partition)

   if *new-colors* is a subset of *old-colors* **then**

      subtract-colors = old-colors − new-colors.

      Find the hot pages in *subtract-colors* within the *budget* limit and reallocate to *new-colors* in a round-robin fashion.

   end if

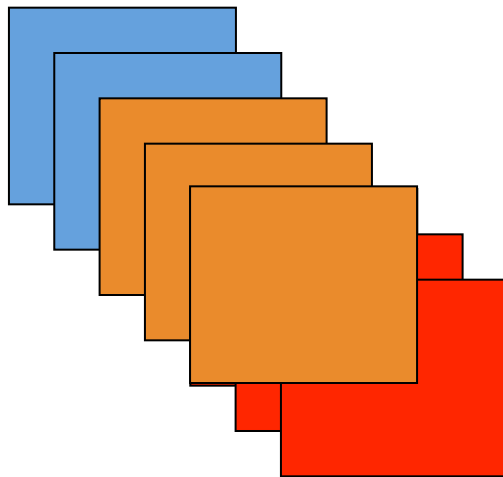   **if** *old-colors* is a subset of *new-colors* **then**

      add-colors = new-colors − old-colors.

      Find the hot pages in *old-colors* within the $\frac{|new\text{-}colors|}{|add\text{-}colors|} * budget$ limit, and then move at most *budget* (*i.e.* $\frac{|add\text{-}colors|}{|new\text{-}colors|}$ proportion) of them to *add-colors*.

   end if

Re-coloring Procedure – Version II

hot

warm

cold

Cache share decrease

Budget = 2 pages

Middle & End

point 1
point 2
point 3
point 4

point 5
point 6
point 7
point 8

point 1

point 7

Summary

Big Picture

Speech vs writing

Delivery & Confidence

Practice!

Monotonous voice?

Improve articulation with tongue twisters

Peter Piper picked a peck of pickled peppers…

Questions

Anticipate them

Prepares slides

You are the expert

Reward questioners with something!

Aggressive questioners

Follow up

Summary

Have a goal

Know your audience

Plan

    Content, Delivery, Design, Practice

    Great visuals are key

Exceed your audience expectations

Accomplish your goal

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Useful Resources

Oral

David Patterson: How to Give a Bad Talk http://pages.cs.wisc.edu/~markhill/conference-talk.html#badtalk

Mark Hill's "Oral Presentation Advice", http://pages.cs.wisc.edu/~markhill/conference-talk.html

CRA-W, http://www.cra-w.org/gradcohort

http://www.randsinrepose.com/archives/2008/02/03/out_loud.html

http://www.slideshare.net/selias22/taking-your-slide-deck-to-the-next-level

http://www.presentationzen.com/

General

Female Science Professor blog! http://science-professor.blogspot.com/

Writing

- **Joseph Williams, "The Basics of Clarity & Style"**

- Gopen & Swan "The Science of Scientific Writing" http://www.americanscientist.org/issues/feature/the-science-of-scientific-writing/9

- Many schools provide many writing resources: Use them!

  Writing center or tutor.

- It may be worthwhile to *pay* a writing tutor to help teach you to edit your own work

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