

# CS 858 – User Authentication

## Advice on Giving Technical Presentations

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## Goal


- Giving you advice that will improve your presentations in this course and your technical presentations in general
- Possibilities for improvement will be presented based on slides from previous student presentations



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## General Advice - Preparation


- Present the paper as if it was your own work
- Recommended talk structure
  - Introduction with motivation
  - Middle section for explaining methodology and results
  - Conclusion for summarizing important ideas and results
  - **Look at presentation review form**
- Concentrate on (some) important points
  - Do not present every single detail
  - Optional: Put (some) additional material on backup slides
    - Backup slides can make you look really prepared while answering questions



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## General Advice - Preparation


- Target your talk at your audience
  - Maybe present additional background material
  - Give guidance (e.g., motivation/overview slides)
- Practice your talk
  - Especially if you are a non-native English speaker
  - At least twice, but do not over practice
  - Memorize first few slides



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## General Advice – During the Talk

- Face your audience and use feedback from it
  - Are people looking confused?
  - Are they falling asleep?
- Repeat questions
  - You can delay a question until later
  - Unless it is a clarification question
- Do not read off slides
- Do not mumble
- Watch your hands
- Watch the clock



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# Preserving Privacy in Environments with Location-Based Applications

Ginger Myles, University of Arizona


Adrian Friday, Lancaster University

Nigel Davies, University of Arizona and Lancaster University

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## Identify Yourself


- Give your name on the title side
  - You want your audience to remember you!
  - Emphasize your name if multiple authors
    - Not relevant for this course
- Examples:
  - Alice, Bob, and Carol
  - Alice
  - Joint work with Bob and Carol
- Maybe repeat your name on each slide
  - Not in this course, but in a conference talk
  - Late arrivals to your talk should also be able to remember you

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## An Analysis of Private Browsing Modes in Modern Browsers


Gaurav Aggarwal   Elie Bursztein   Collin Jackson   Dan Boneh




USENIX Security 2010

Presented by: 

David R. Cheriton School of Computer Science  
University of Waterloo  
200 University Ave W  
Waterloo, Ontario, Canada  
N2L 3G1


▶  2010-10-07

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## Information on Title Side


- Yes:
  - Paper title
  - Paper authors (maybe with pictures)
  - Author affiliations
  - In this course, you should also list your name
- Maybe:
  - Paper venue
    - Useful if a presentation is made available online afterwards
  - University and/or research group logos

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## Information on Title Side (cont.)


- No:
  - Date of presentation
  - Sponsorship logos (unless required by sponsor)
  - Address
  - In general: avoid visual clutter

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**Outline**  
 Introduction  
 Description of Security Games  
 Nash Equilibrium Analysis  
 Identification of Social Optima  
 Conclusions and Discussion


- 1 Introduction
  - Concepts and Definition
- 2 Description of Security Games
  - Total Effort
  - Weakest-link
  - Best Shot
  - Weakest-target without Mitigation
  - Weakest-target with Mitigation
- 3 Nash Equilibrium Analysis
- 4 Identification of Social Optima
- 5 Conclusions and Discussion

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## Be Careful About Outline Slide

- At the beginning of your talk, you want your audience to become excited about what is coming next
- You do not want to put your audience asleep while going through a lengthy outline slide full of technical terms
- Consider having short motivation/introduction (i.e., an attention grabber) after title slide, followed by outline slide
- Keep outline slide short and understandable, wherever you place it

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**Outline**

- Introduction
- Related work
- Threat
- Data Collected
- Theories
  - Possible explanations?
- Analysis
- Conclusions

2022/09/21 Presented by [redacted] 6

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**Agenda**

- Background & motivation
- Research questions
- Research methods
- Case study
- Analysis & implication
- Conclusion
- Discussion

[redacted], Oct 19th 2

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**Outline Slide (cont.)**

- Do not have a generic outline slide, make it interesting!
- Outline slide is not strictly required but useful if you are an inexperienced speaker or if your talk is long (30-45 mins)
- If you have an outline slide, consider repeating it throughout the talk
  - Emphasize topic to be discussed next

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**Security Issues**

- Security issues of wireless networking
  - Availability
  - Authenticity
  - Integrity
  - Confidentiality
- A concrete example of a thermometer

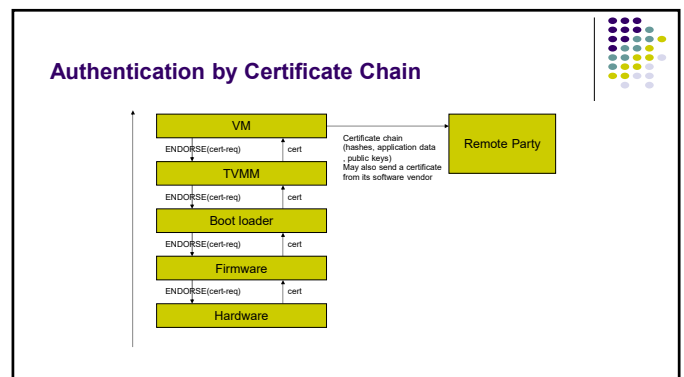
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**Put Page Numbers on Slides**

- Makes it easier for your audience to write down questions and ask them at the end

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## Use Large Fonts

- People sitting in the last row should still be able to read the text on your slides
- Use fonts of size at least 20pts

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## Security Objective

### Uniqueness

Use a unique password for each site.

### Resistance

Resist offline dictionary attacks on user-chosen secrets.

### Adaptive

Adapt to the development of faster computers.

### Computed Password

Avoid storing passwords in long-term storage.

### No centralized dependency.

Avoid introducing a centralized dependency.

### Phishing resistance

Resist attacks based on fake website login forms

### Websites identification

Help the user reliably identify websites

### Resist attacks based on imitating the browser UI

Resist attacks based on imitating the browser UI.

Break the habit of entering passwords into webpages

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## Limit Number of Lines

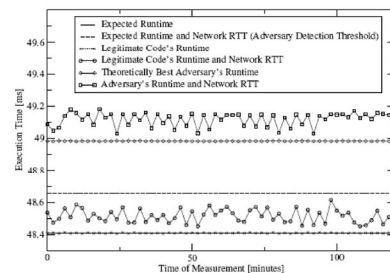
- Do not crowd your slides
- About 10-12 lines of text
  - Goes along with font size

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## Result



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## Each Slide Needs a Message

- Do not expect your audience to find the message on its own
- Especially important for slides showing graphs
- For example, give message in the title
  - "Algorithm Foo improves latency by 10%" is much more useful than "Results"
- Explain graphs thoroughly

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## Thank You

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## Final Slide

- Avoid final slides with no useful information
  - "Thank you"
  - "Questions?"
- The final slide is the slide that your audience likely spends the most time looking at
- Put take-home message(s) on final slide
  - Problem, approach, summary of results
  - Interesting suggestion: Repeat miniature versions of your key slides

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## Privacy: Canada

- Personal Information Protection and Electronic Documents Act
  - Very much as EU Directive
  - Requires consent of the subject
  - Supply a person with a product/service even in the case of refusing
- Implementation:
  - 2001 – applied to federally regulated industries (airlines, banking, broadcasting)
  - 2002 – health sector
  - 2004 – any organization that collects personal info

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## Use Fonts Without Serifs

- This is difficult to read (Times New Roman)
- This is easier to read (Verdana)
- But do not use Comic Sans MS
  - Some people really hate it, and you do not want to annoy your audience

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## Important Tenets of CAPTCHAs

- Code and database public.
- Randomness unknown.
- Some humans probability of success very high.
- AI problem "hard" < human success.
- Humans can take as long as they like; programs have time limits.

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## Watch Punctuation

- Only complete sentences have full stop at the end
- If you do not want to worry about punctuation, just leave it away entirely
  - But be consistent

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## List of Sites

Website	Start or Spoof	Flipping or Security Tactic Used (Partial List)	% Right (avg over)	% Wrong (avg over)
Bank Of the West	Spoof	URL, double-click event, public in content, Verisign logo and certificate validation, user account alert message	25.00	25.00
PayPal	Spoof	Use identical HTML, use identical language HTML, to consider browser status in file address bar, status bar and SSL indicators for mobile users	23.00	27.00
Yahoo	Real	URL, IP address, content, JavaScript, SSL, image display, no graphics	41.00	29.00
PayPal	Spoof	URL, script, equivalent, public in content	41.00	29.00
PayPal	Spoof	URL, IP address, public in content	41.00	29.00
Capital One	Real	URL, IP address, content, JavaScript, SSL, dedicated browser, script, images	50.00	50.00
Paypal	Spoof	JavaScript of legitimate SSL, protected Paypal page within a regular web-page	50.00	50.00
American	Spoof	URL, JavaScript, SSL	50.00	50.00
Bank of America	Spoof	Image page, random on top of legitimate BOFA homepage, public in content	60.00	30.00
Bank Of The West	Spoof	URL, IP address, script, anti-fraud message (script, large amount of personal data)	65.00	35.00
USBank	Spoof	URL, IP address, public in content, security message, identity verified (script, large amount of personal data)	65.00	35.00
Star	Spoof	URL, IP address, account verification, script, large amount of personal data	65.00	35.00
Yahoo	Spoof	URL, content, status-bar, script, account verification (script, large amount of personal data)	77.00	23.00
NBA	Spoof	URL, IP address, public in content, account verification (script, large amount of personal data)	82.00	18.00
Yahoo	Real	SSL, protected page, URL, SSL, script	90.00	10.00
Bank Of America (Bank Account)	Real	SSL, protected page	90.00	10.00
PayPal	Real	SSL, protected page	91.00	9.00
PayPal	Real	SSL, protected page	91.00	9.00
Bank One	Real	SSL, protected page	90.00	10.00

Different technique have representatives here.

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## Do not Use Filler Slides

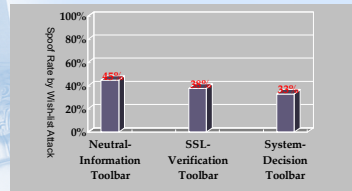
- Do not present slides that you do not expect your audience to read anyway
- What is the point?

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## The Results of Wish-list Attacks



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## Miscellaneous

- Do not use 3D if there is no need
  - Avoid "chart junk" (Edward Tufte, "The Visual Display of Quantitative Information")
- Use consistent way for emphasizing key points
  - This finding is **important**, so is **this one** and **that one**
- A picture often explains a concept more easily than many words
- Be careful about fancy effects
  - Background colour scheme, animations, slide transitions,...

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## Miscellaneous (cont.)

- Ideally, your slides do not need your spoken part to be understandable
- Spell check your slides, check your grammar
- Give credit for material (e.g., figures or pictures) not created by you
  - Can be in font smaller than 20pts
- Be polite
  - At the end: "Thank you for your attention."
  - "That's a good point. <Followed by your answer to an audience question>
  - Also gives you a little extra time for formulating your answer

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## More Resources

- John Regehr: [The Dreaded Practice Talk](#)
- Michael Hicks: [How to Write a Conference Talk](#)
- Nick Feamster: [How to Give a Sharp Technical Talk](#)
- Simon Peyton Jones: [How to give a great research talk](#)
- Andreas Zeller: [Summarizing your presentation with miniature slides](#)

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