UMR IRISA

How to make a (really) bad talk

Based on slides by David Patterson & others

Institut de Recherche en Informatique et Systèmes Aléatoires

CentraleSupélec cnrs ENS rennes Inria IMT Atlantique Bretagne-Pays de la Loire École Mines-Télécom INSA RENNES Université Bretagne Sud UBS Université de RENNES 1

Disclaimer

Why this (bad) talk ?

- To teach you how to make bad talks ?

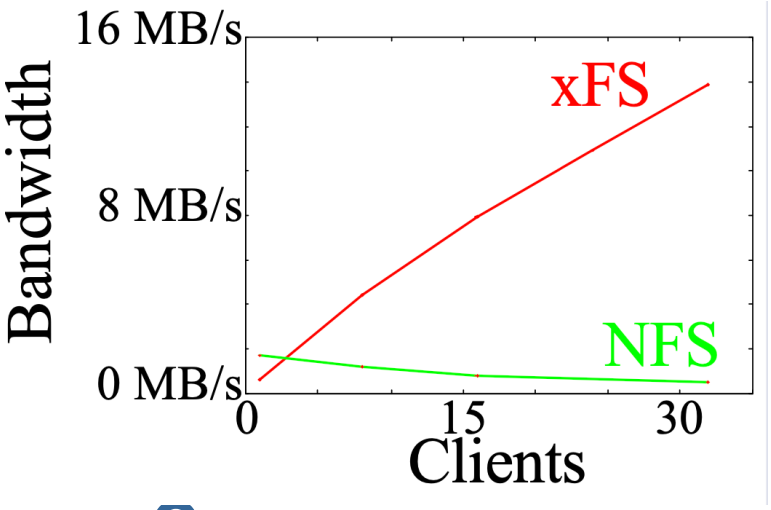
0. Thou Shalt Challenge the Setup

- **Bring your own custom device**
  - Try to project from your favorite FPGA board
- **Use a weird/unpopular presentation format**
  - Powerpoint‘78, Barkdown, etc.
- **Do not upload your slides before the event**
  - This is useless, everything always go well

I. Thou Shalt Not Illustrate

- **Favor tables over figures/plots**
  - Precision is important in a talk
  - Your job is ***not*** to help audience draw on conclusions

Clients	xFS BW	NFS BW
1	5.71995e+05	1.65997e+06
8	4.425325e+06	1.19731e+06
16	1.095445e+07	7.88792e+05
32	1.38927e+07	4.70548e+05



- **Who should you believe ?**
  - Dijkstra : “Pictures are for weak minds”
  - Confucious: “Picture = 10K Words”

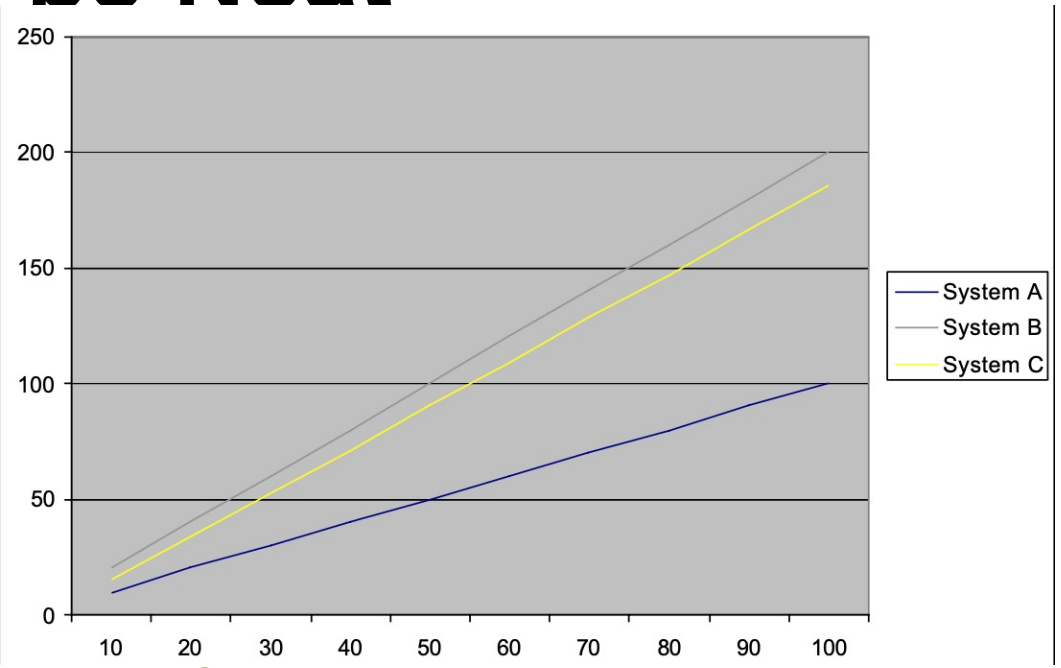
II. Thou Shalt Not Covet Brevity

- **Do not omit technical material from your paper**
  - You did the work; it is important; make sure the audience understands all nuances of approach and also how smart you are
  - Many in audience will never read the paper – they *must* leave the room fully understanding your approach, motivation, and contributions!
- **Include lots of material in each slide**
  - Avoid sentence fragments because they may make you look illiterate.
    - Also, if the slides have full sentences, then you can read the slides verbatim and audience will be able to follow along.
  - Some may say that no item on a slide should span more than one line. Ignore this! Take as much room as you need to make your point. Seriously, if this was a bad idea, powerpoint would certainly not make it possible !
- **Use small fonts to provide information-rich slides.**
  - Fonts smaller than 24 point are fine
    - And the important people sit in front anyhow!
- **Impress audience with difficulty of material**
  - They should leave knowing that you did a lot of work and that it was hard, even if they don't understand all of the details.
- **Avoid moving content to "backup slides"**
  - You probably won't get a chance to show many of them

III. Thou sahlt Not be Neat

- Slide layout << ideas!

  "I'm a doctor, Jim, not a g
  designer."



spelling checker = waste of time

- don't worry about consistent capitalization
  Or structure/bullet/etc consistency

* Use color and *fonts* to emphasize key ideas

IV. Thou Shalt Animate All Your Slides

- **Keep audience on your point**
- **Surprise them with your train of thought**
  - If they know the point
  - before you make it
  - They may think
  - that they could
  - have figured it out
  - For themselves
- **Will they then realize**
  - How clever you are?

V. Thou Shalt Remain Humble and Demure

- **No eye contact**
  - Bonus: It helps avoid questions
- **Do not distract with motion**
  - Keep arms at side, stay at podium
- **Do not use a laser pointer**
  - Audience should focus on both your speech and your slides
- **Avoid rhetorical flourishes**
  - Keep voice level
    - Avoid raising voice on key point
    - Avoid pause
  - Do not ask rhetorical questions / do not use humor ?

VI. Thou Shalt Not Emphasize Key Points

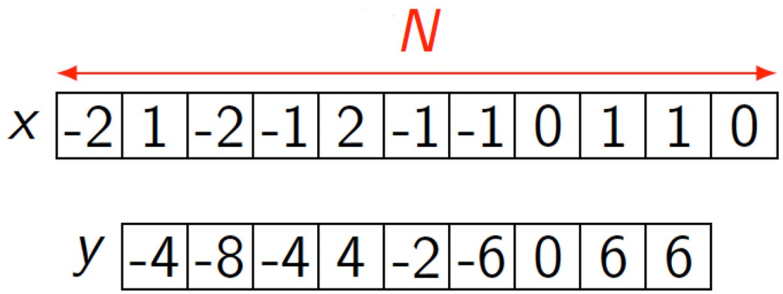
- **Do not introduce talk/talklet/slide**
  - Cover more technical material
- **Make sure you don’t have a punchline**
  - Audience will to figure out the « take home message »
- **Do not structure slide**
  - All points are equally important
  - Graphs should speak for themselves

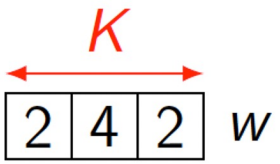
VII. Thou shalt not skip slides in a long talk

- ***You*** **did the work**
  - The research
    - And prepared the slides
  - Audience will be interested in seeing them
    - Even if briefly

ABFT for 1D convolution

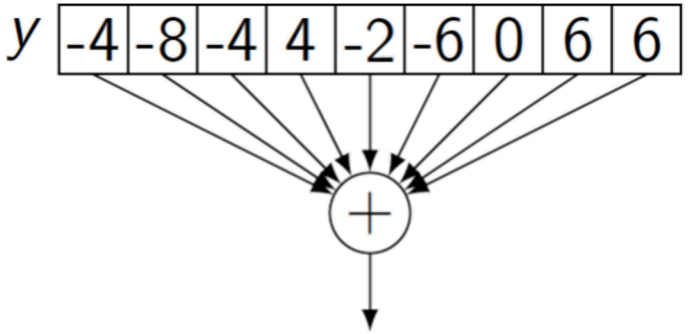
- For vectors x and y we have $y_n = \sum_{i=0}^{K} x_{n+i} \times w_i$





$O(NK)$

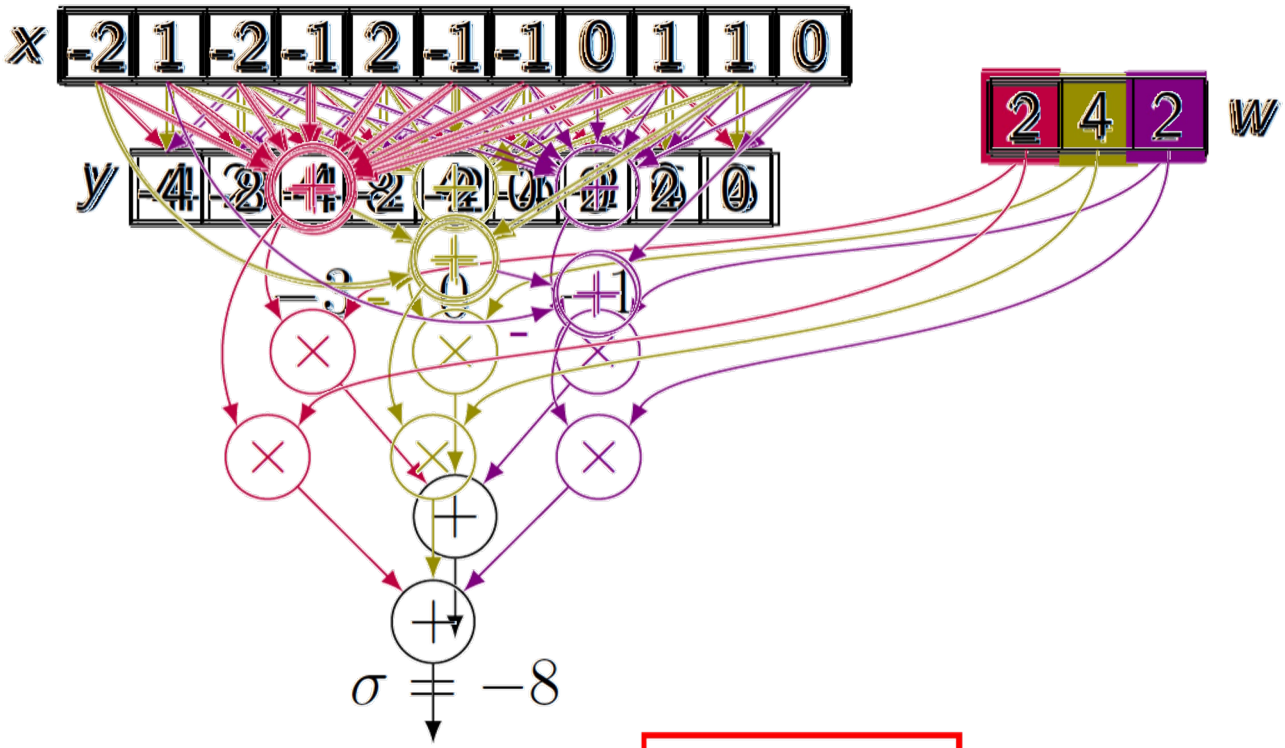
- The ***output*** checksum is given by $\rho_{out} = \sum_{n=0}^{N-1} y_n$



$\rho = -8$ $O(N)$

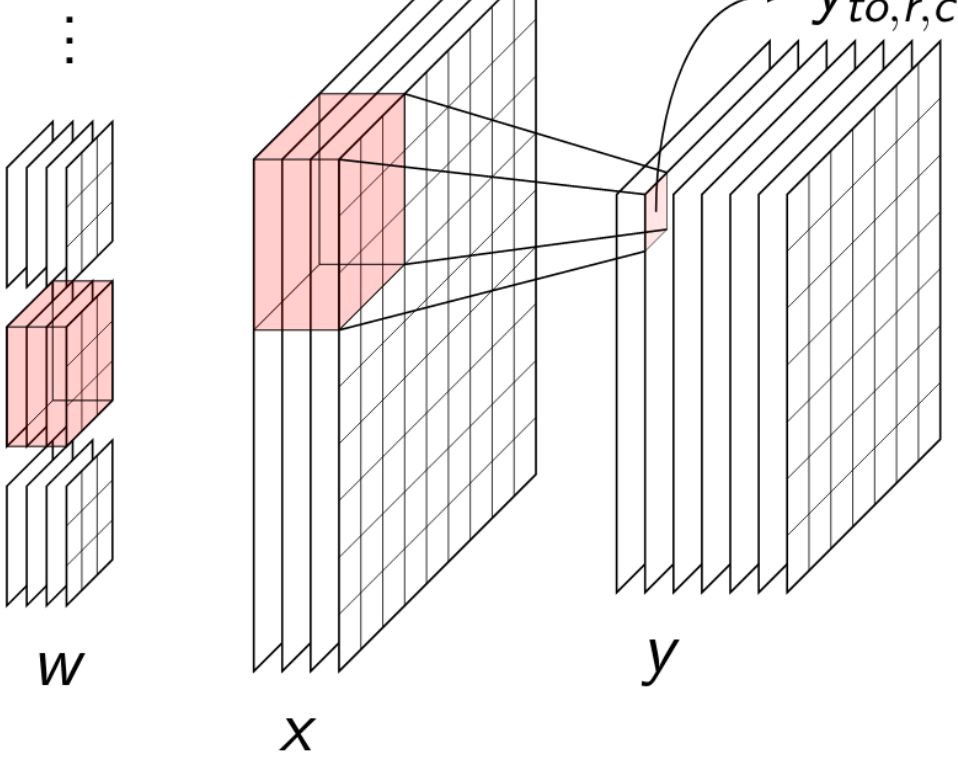
ABFT for 1D convolution

- The ***input*** checksum $\rho_{in} = \sum_{n=0}^{N-1} \sum_{k=0}^{K} w_k * x_{n+k}$



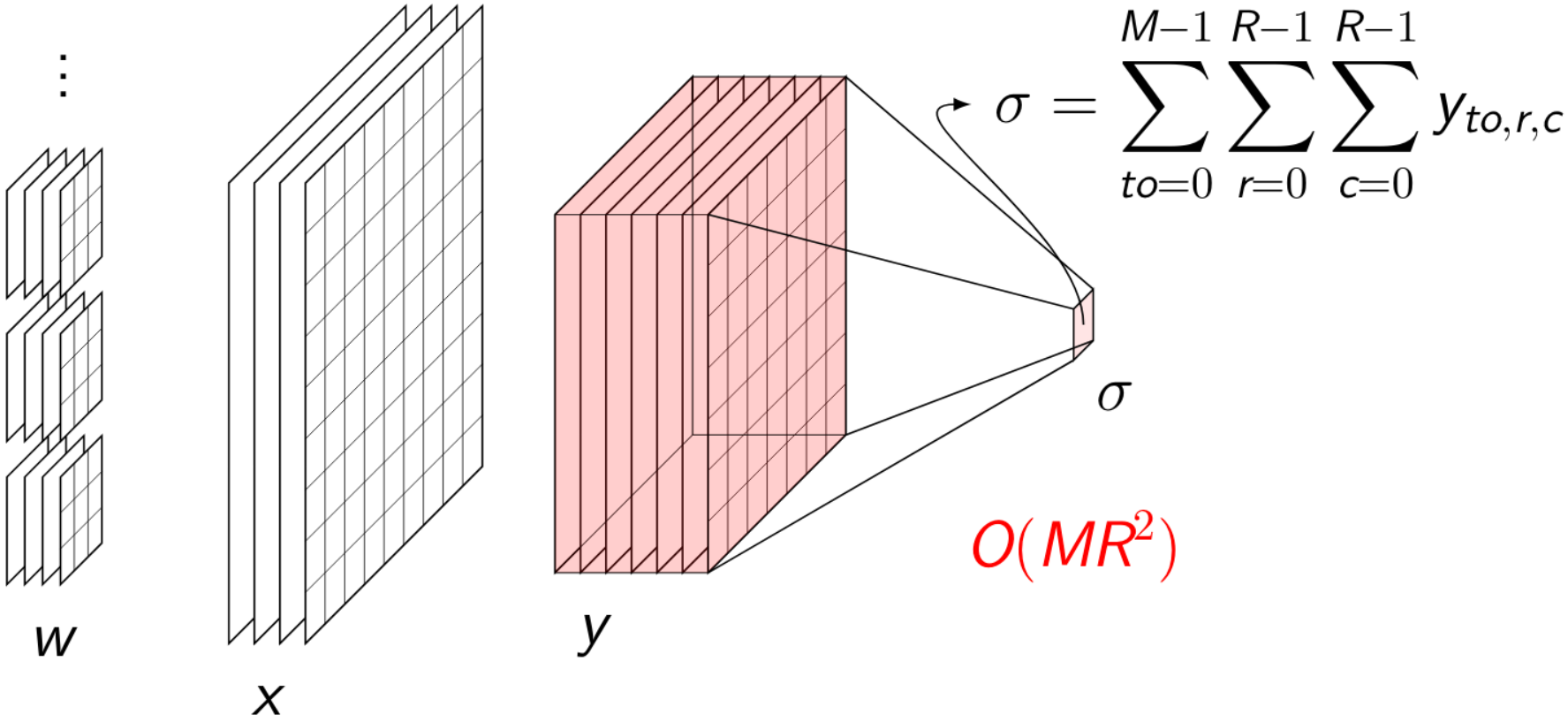
$O(N+K)$

CNN convolution

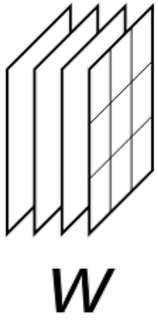


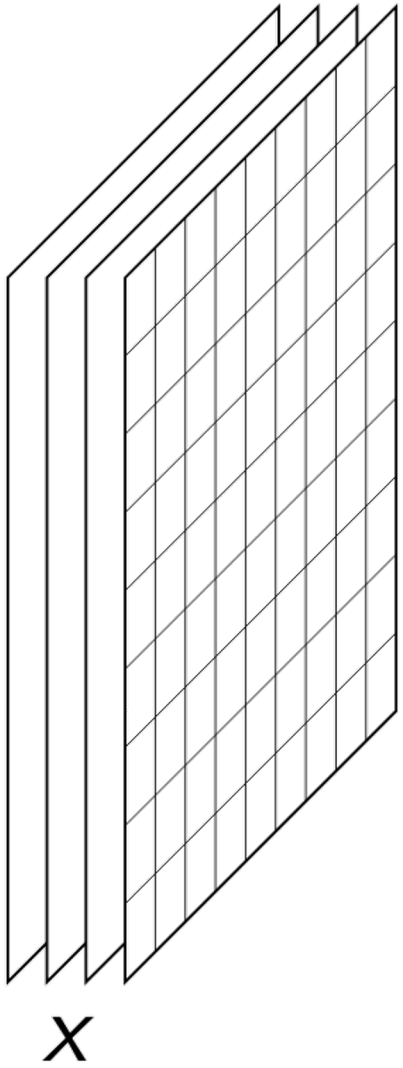
$$y_{to,r,c} = \sum_{ti=0}^{N-1} \sum_{i=0}^{K-1} \sum_{j=0}^{K-1} x_{ti,r+i,c+j} \cdot w_{to,ti,i,j}$$

Output checksum

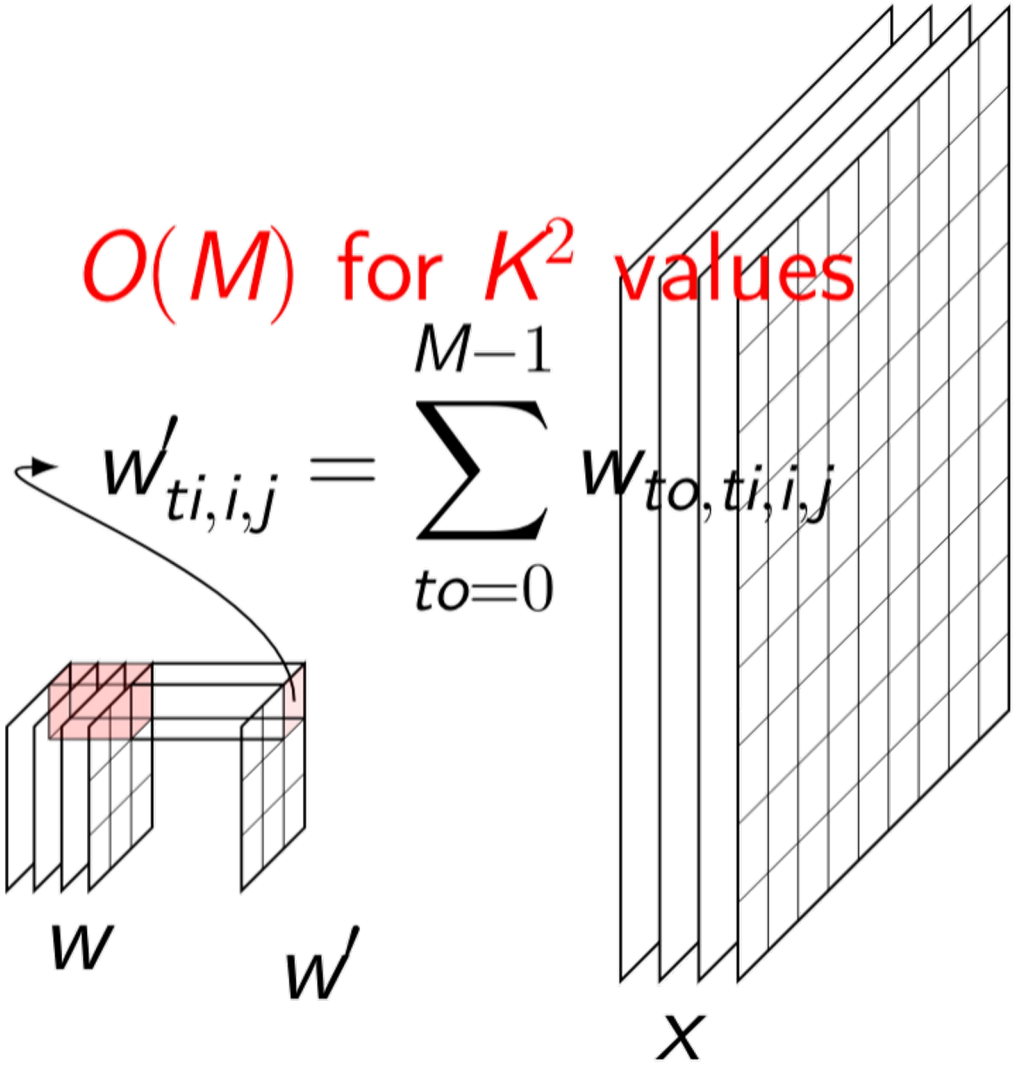


Input checksum

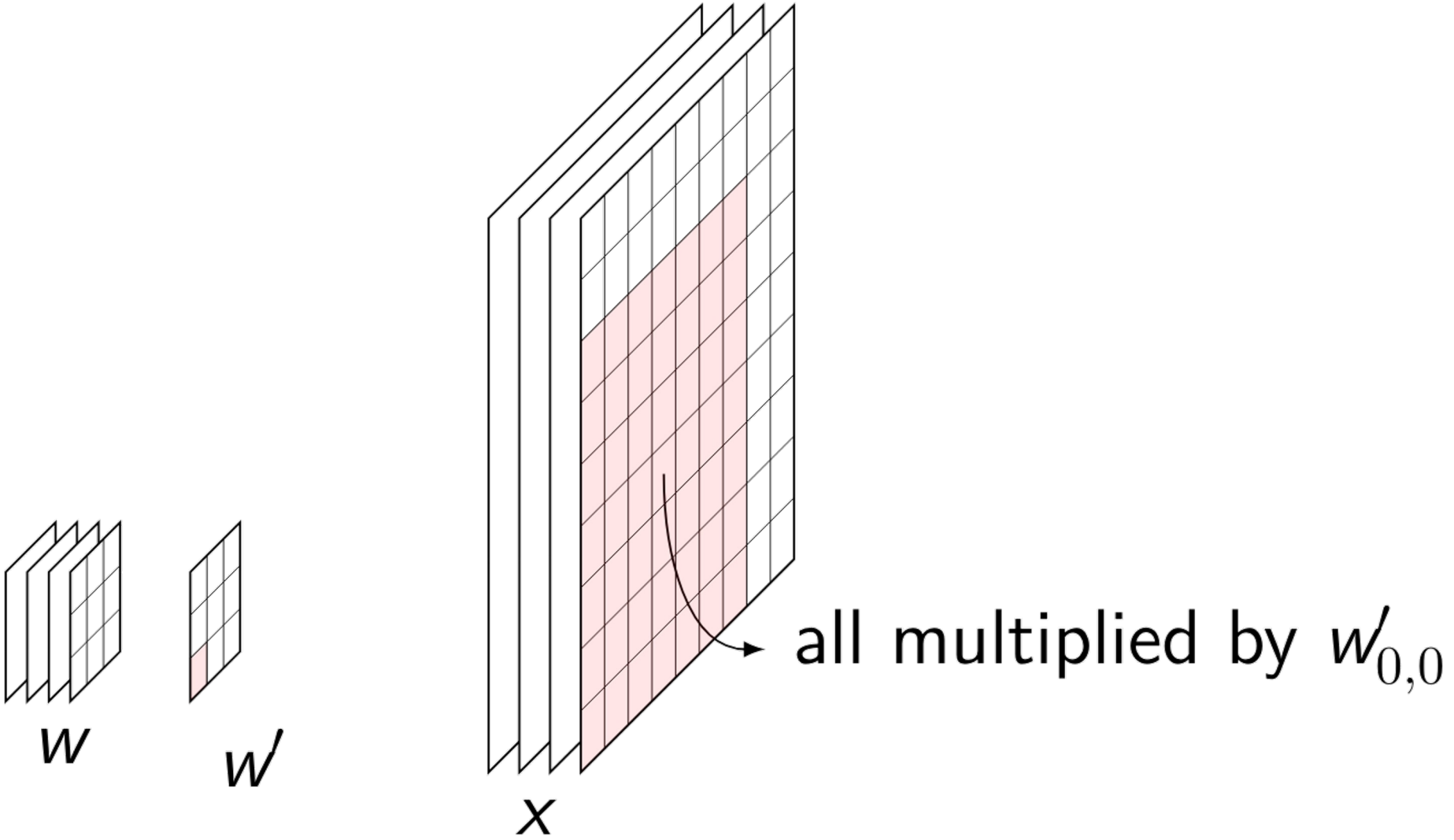




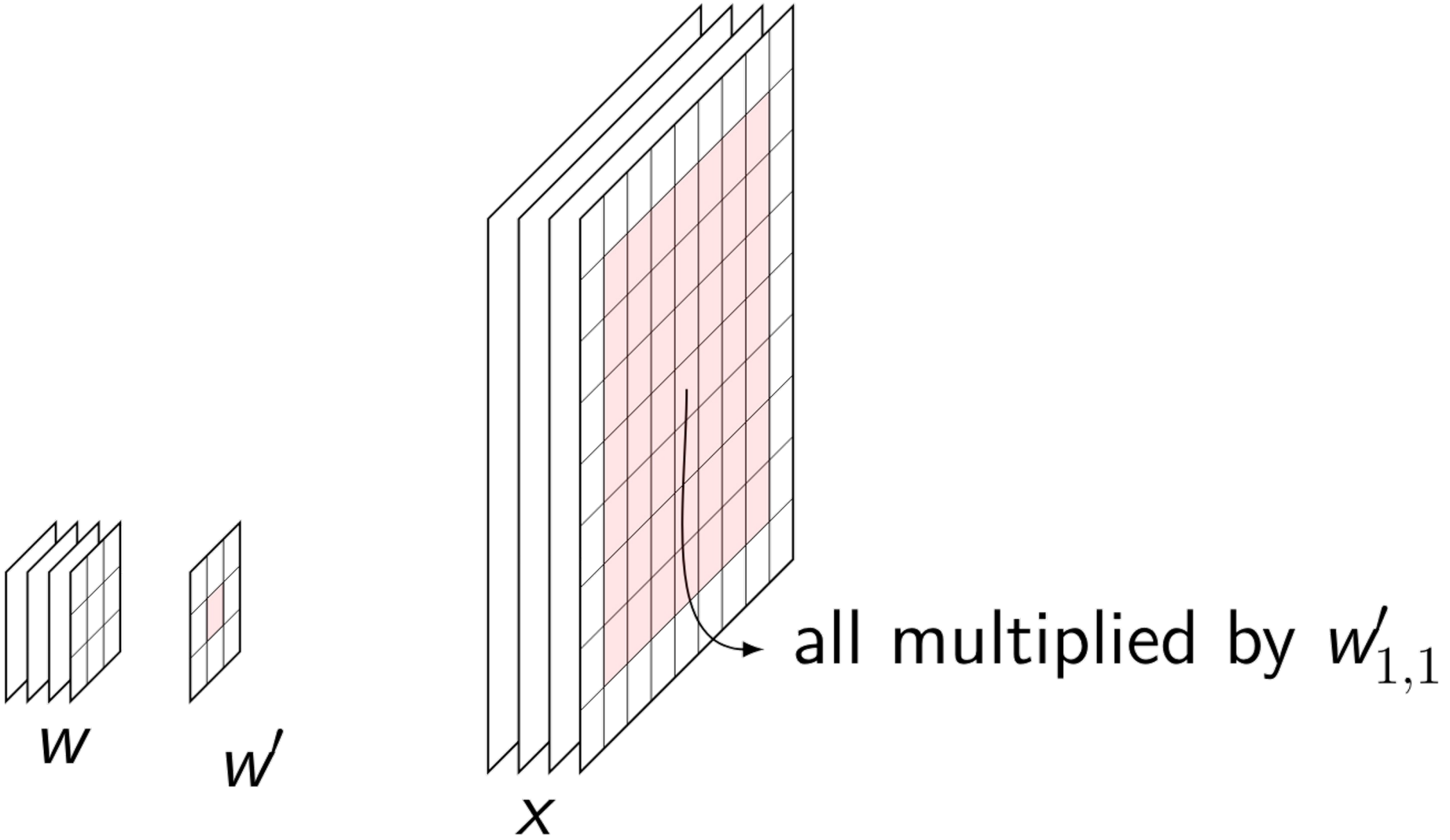
Input checksum



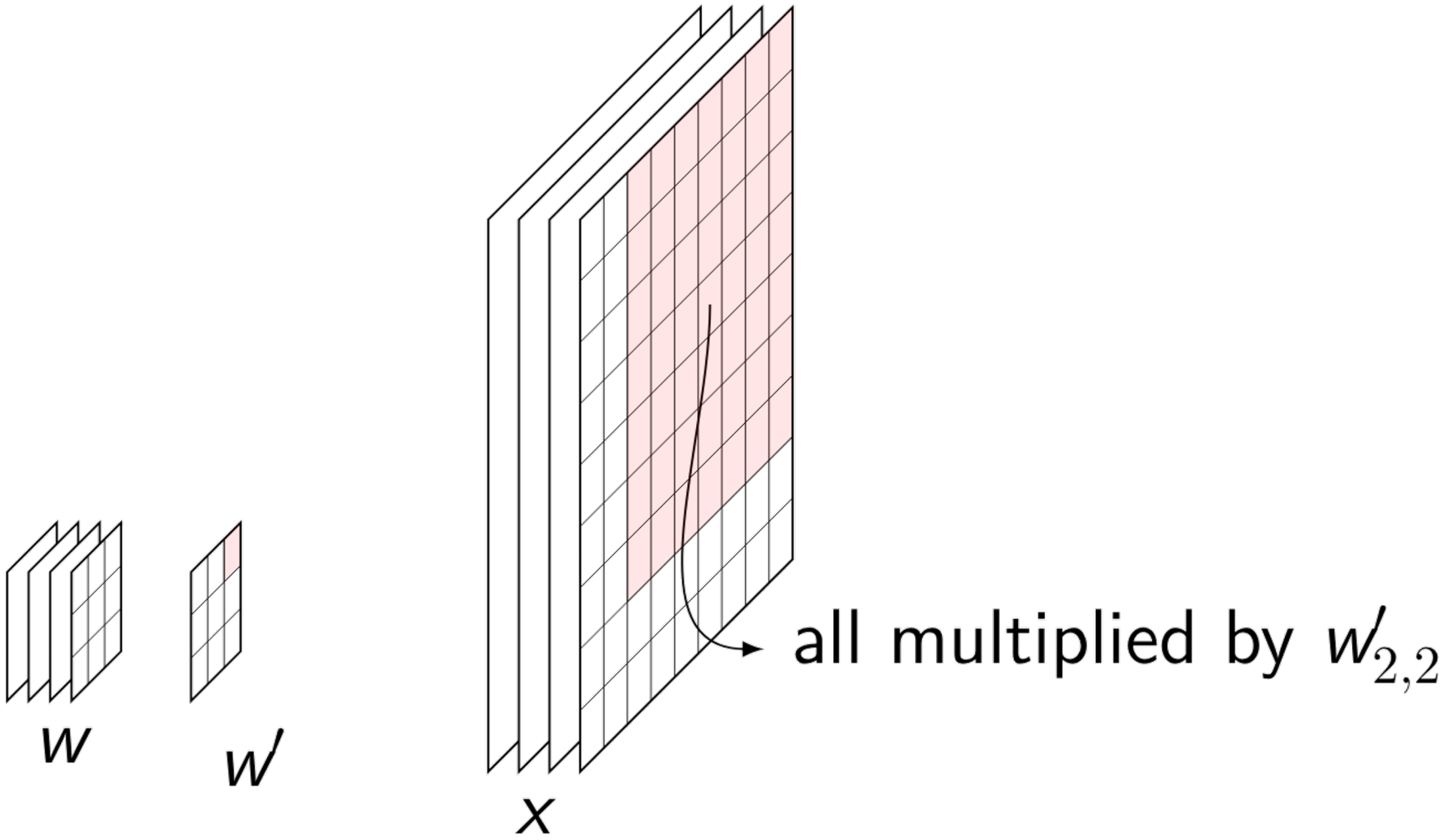
Input checksum



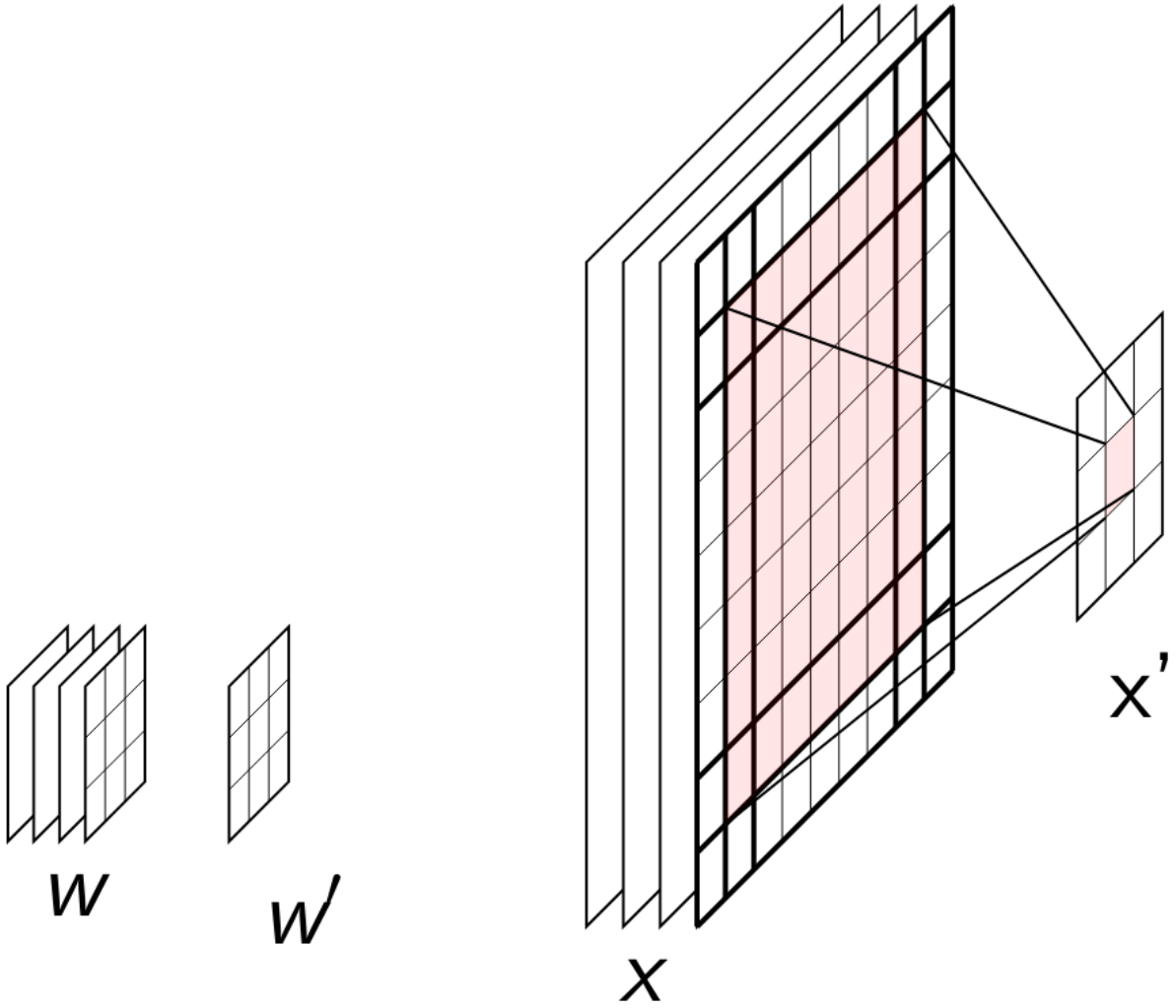
Input checksum



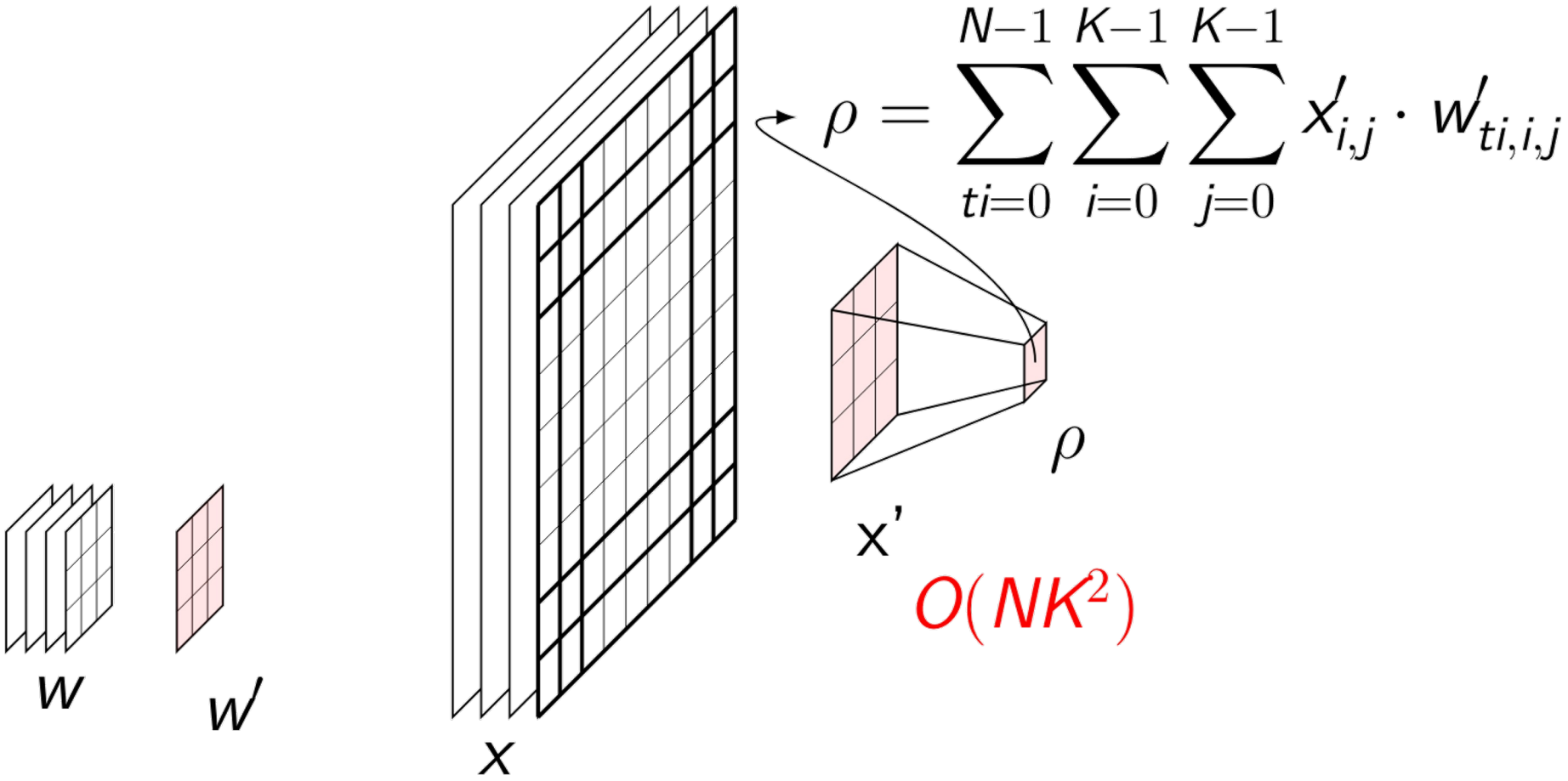
Input checksum



Input checksum



Input checksum



VII. Thou shalt not skip slides in a long talk

- **Audience can stay longer**
  - Your work much more interesting
    - Than the next speakers
    - Than the break or the lunch
- **If necessary, skip conclusions**
  - Just repeating points you've already made

VIII. Thou Shalt Not Plan for Q&A

- **Keep answers spontaneous**
- **No such thing as dumb question**
  - Just dumb questioner
  - Whose fault is it they don't understand?
  - Universal answer:
    - Dismiss question as irrelevant/naïve
  - Everyone remembers a good argument
    - Good publicity for paper
- **Approach**
  - Don't repeat question
  - Start talking quickly + when in doubt, bluff

IX. Thou Shalt Not Prepare Slides Early

- **Our flow is illustrated on**

Add some nice figure here

IX. Thou Shalt Not Walk In Others' Shoes

- **You are the expert**
  - You've been working on project for years
  - Anyone could present dumbed down version
  - Audience's chance to hear the expert view
- **Don't worry if part of talk "drags"**
  - Present ***all*** technical details
    - Especially complex formulas

X. Thou Shalt Not Practice

- **Benefits**
  - Practice wastes Hours
    - Out of several years of research
  - Audience:
    - Experts only (e.g., advisor and group)
  - 1 Week is plenty
    - Converge on content the Night before presentation

The Most Important Rule !

Alternatives to a Bad Talk

- **Talk = motivate people to read your paper**
  - Also an opportunity to leave a strong impression
- **Resources**
  - The punchline method
    - http://people.rennes.inria.fr/Tomofumi.Yuki/pline.html
  - Guide from Markus Püschel (ETH)
    - https://people.inf.ethz.ch/markusp/teaching/263-2100-ETH-fall17/guide-presentations.pdf
    - https://ethz.ch/content/dam/ethz/special-interest/infk/inst-infsec/information-security-group-dam/education/guide-presentations.pdf