Lecture 25

CSE 331

Oct 31, 2016

Mid-term temp grade

note ☆ stop following 32 views

Mid-term temp grade

(For details on grading of mid-term exam, see @559. For one-on-one meetings to talk about your 331 performance see @578.)

Your temp letter grades have been assigned. To calculate your grade, you must first calculate your raw score R as follows:

- Add up your HW scores from HW1-4 to calculate H (out of a max of 400)
  - You need to do the following modification for each HW score. If you got Q_1, Q_2 and Q_3 points on questions 1, 2 and 3 respectively in a HW, then your HW score should be $Q_1 + \max(Q_2, 3 \cdot Q_3) + \min(Q_2/3, Q_3)$. (This will swap your Question 2 and 3 scores if you do better on Question 3).
- Let Q be your quiz 1 score (out of a max of 10)
- Let M be your mid-term score (out of a max of 100).
- Let P be your mini-project pitch score (out of a max of 100).

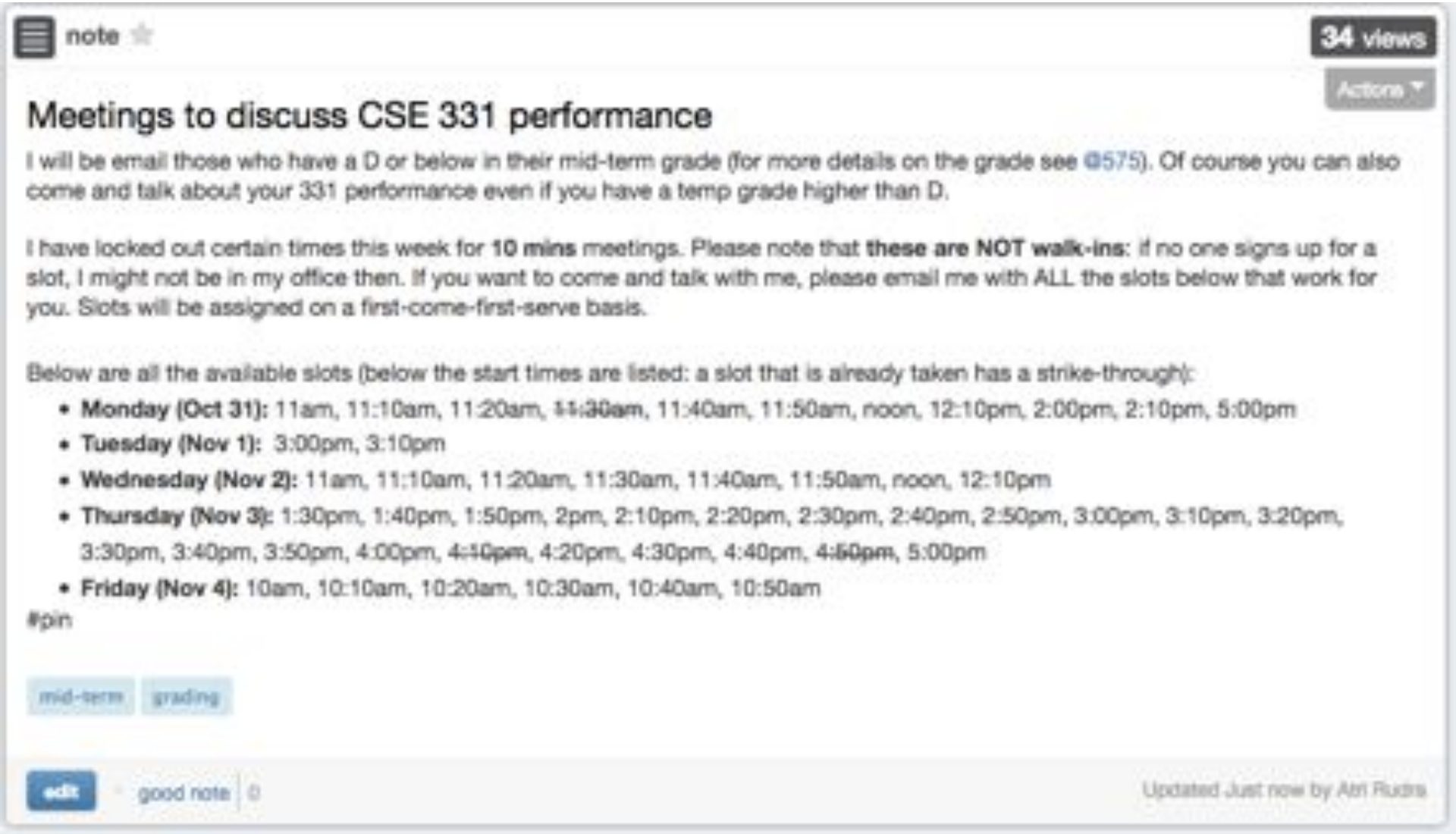
Then R is calculated as follows (out of a maximum possible of 58.5:

$$R = \frac{31}{400} \cdot H + Q \cdot \frac{1.5}{10} + \frac{M}{4} + \frac{P}{100}.$$

(I know the above does not fully following the grading rubric since it does not drop any HW score and does not substitute the quiz score with the HW score if you better on the latter. However, since this is just supposed to give you an idea of where you stand in the course, I think the above is fine as a proxy.)

Here are the stats of the raw score:

One-on-one meetings



note

34 views

Actions

Meetings to discuss CSE 331 performance

I will be email those who have a D or below in their mid-term grade (for more details on the grade see @575). Of course you can also come and talk about your 331 performance even if you have a temp grade higher than D.

I have locked out certain times this week for **10 mins** meetings. Please note that **these are NOT walk-ins**: if no one signs up for a slot, I might not be in my office then. If you want to come and talk with me, please email me with ALL the slots below that work for you. Slots will be assigned on a first-come-first-serve basis.

Below are all the available slots (below the start times are listed: a slot that is already taken has a strike-through):

- **Monday (Oct 31):** 11am, 11:10am, 11:20am, ~~11:30am~~, 11:40am, 11:50am, noon, 12:10pm, 2:00pm, 2:10pm, 5:00pm
- **Tuesday (Nov 1):** 3:00pm, 3:10pm
- **Wednesday (Nov 2):** 11am, 11:10am, 11:20am, 11:30am, 11:40am, 11:50am, noon, 12:10pm
- **Thursday (Nov 3):** 1:30pm, 1:40pm, 1:50pm, 2pm, 2:10pm, 2:20pm, 2:30pm, 2:40pm, 2:50pm, 3:00pm, 3:10pm, 3:20pm, 3:30pm, 3:40pm, 3:50pm, 4:00pm, ~~4:10pm~~, 4:20pm, 4:30pm, 4:40pm, ~~4:50pm~~, 5:00pm
- **Friday (Nov 4):** 10am, 10:10am, 10:20am, 10:30am, 10:40am, 10:50am

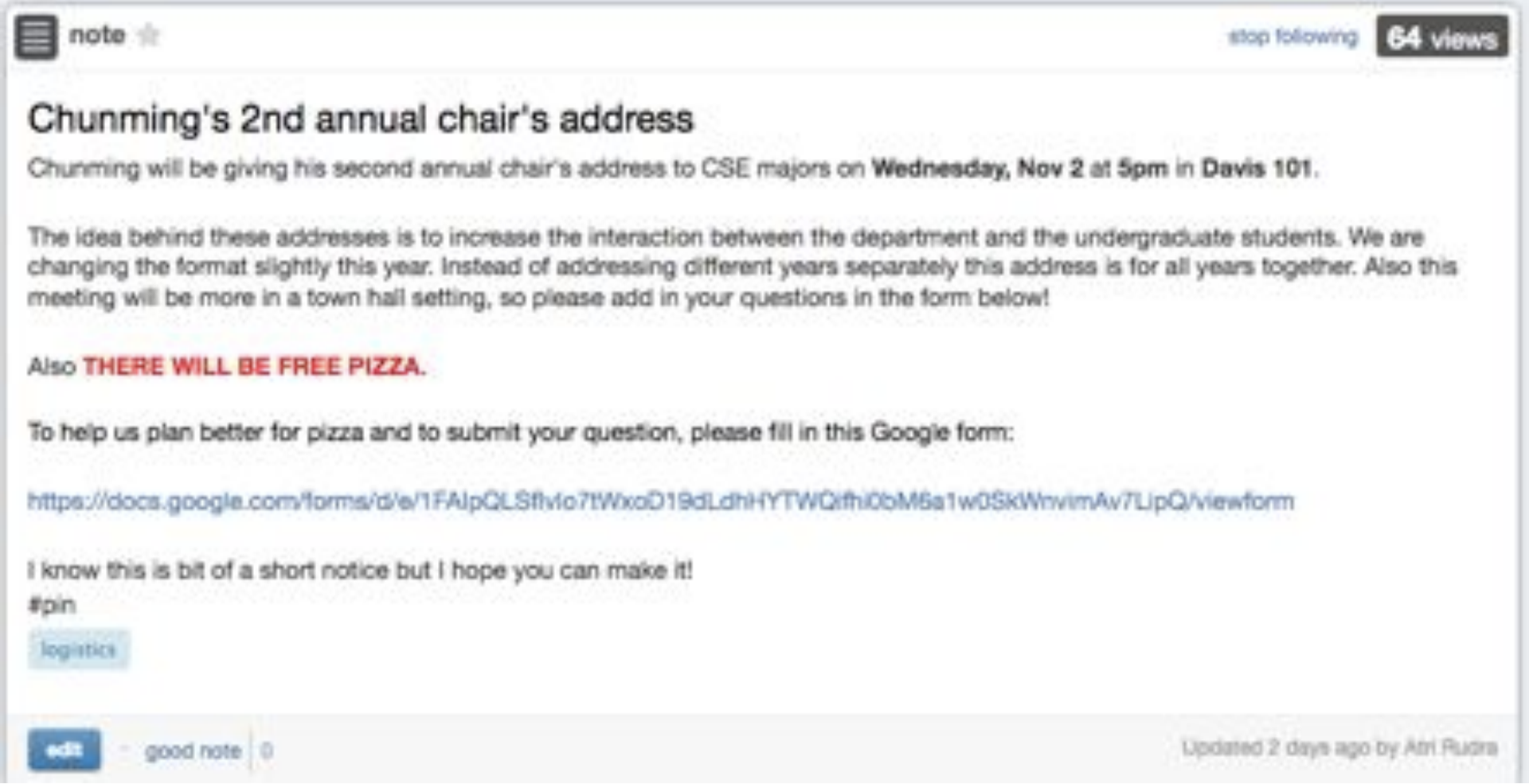
#pin

mid-term grading

edit good note 0

Updated Just now by Ari Rudra

Chunming’s address



note

stop following 64 views

Chunming's 2nd annual chair's address

Chunming will be giving his second annual chair's address to CSE majors on **Wednesday, Nov 2** at **5pm** in **Davis 101**.

The idea behind these addresses is to increase the interaction between the department and the undergraduate students. We are changing the format slightly this year. Instead of addressing different years separately this address is for all years together. Also this meeting will be more in a town hall setting, so please add in your questions in the form below!

Also **THERE WILL BE FREE PIZZA.**

To help us plan better for pizza and to submit your question, please fill in this Google form:

https://docs.google.com/forms/d/e/1FAIpQLSfIvIo7tWxoD19dLdhHYTWQifhi0bM6a1w0SkWnvimAv7LipQ/viewform

I know this is bit of a short notice but I hope you can make it!
#pin

logistics

edit good note 0

Updated 2 days ago by Atri Rudra

Kruskal's Algorithm

Joseph B. Kruskal

Input: $G=(V,E)$, $c_e > 0$ for every e in E

$T = \emptyset$

Sort edges in increasing order of their cost

Consider edges in sorted order

If an edge can be added to T without adding a cycle then add it to T

Prim's algorithm

Similar to Dijkstra's algorithm

Input: G=(V,E), $c_e > 0$ for every e in E

S = {s}, T = Ø

While S is not the same as V

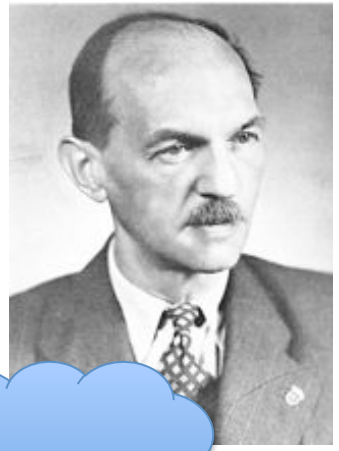
Among edges e= (u,w) with u in S and w not in S, pick one with minimum cost

Add w to S, e to T

(Old) History of MST algorithms

1920: Otakar Borůvka

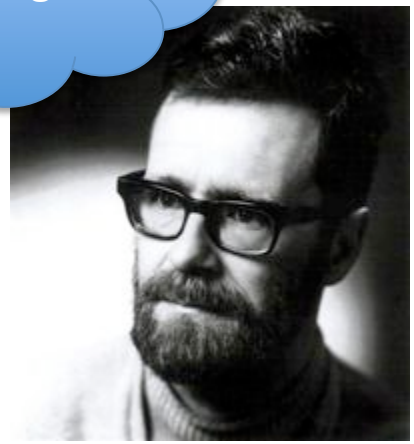
1930: Vojtěch Jarník



Same algo!

1956: Kruskal

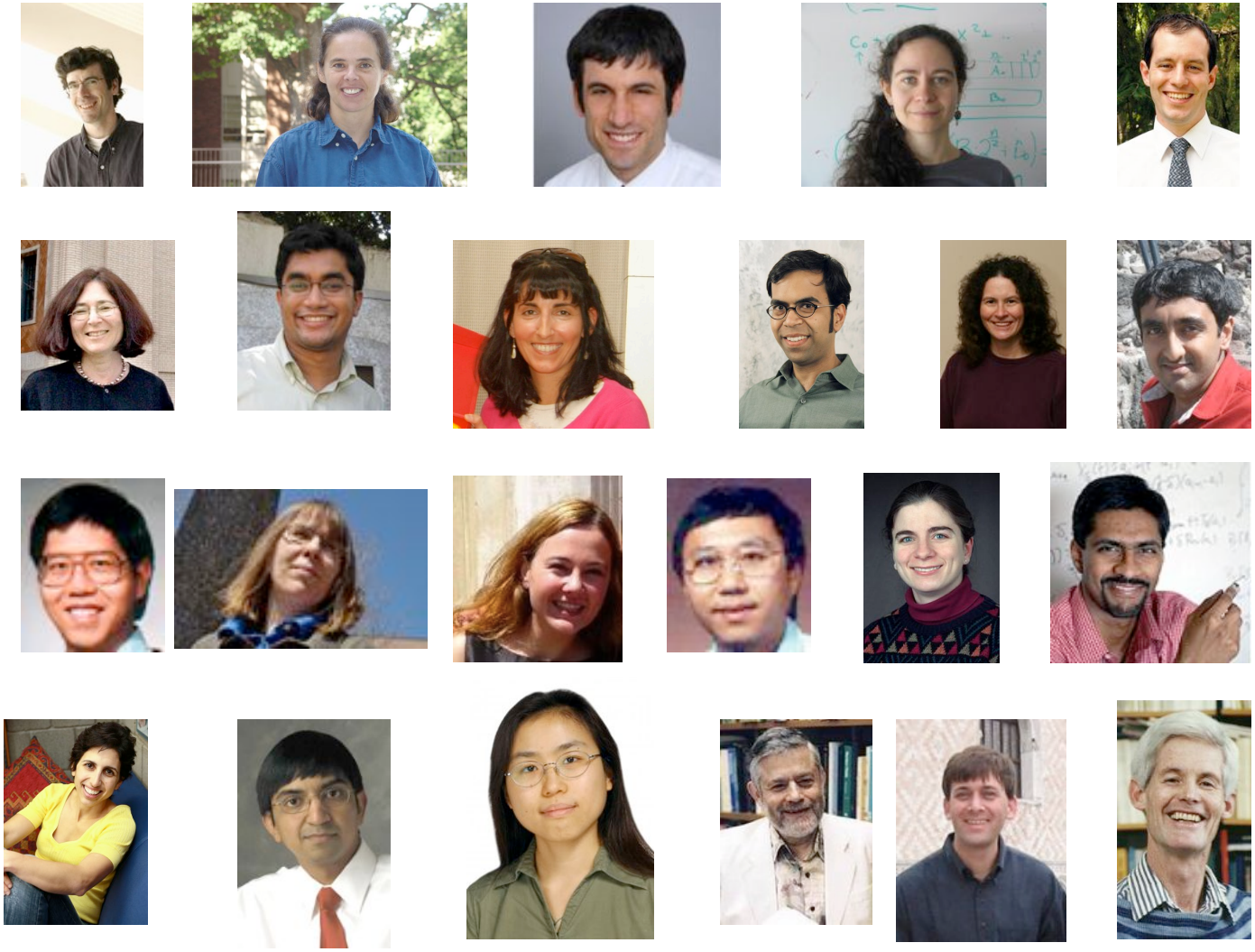
1957: Prim



1959: Dijkstra

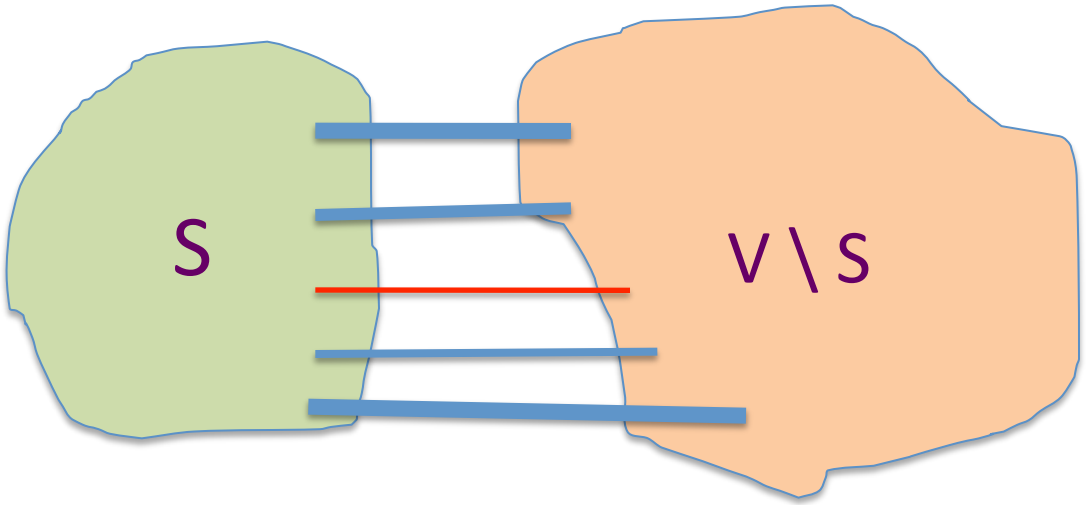
Some modern Algo Researchers

Can you guess the common link?



Cut Property Lemma for MSTs

Condition: S and V\S are non-empty



Cheapest crossing edge is in **all** MSTs

Assumption: All edge costs are distinct

Today's agenda

Prove Cut Property Lemma

Prove correctness of Prim's+Kruskal's algorithm using Cut Property Lemma