

Operating Systems

Nipun Batra
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Any major change in recent OS?

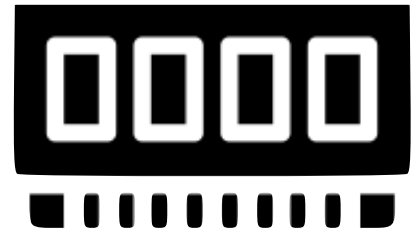
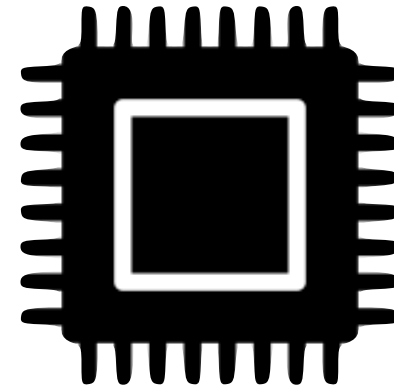
Video: Linux, Windows

Why Study OS?

- “Systems” bucket - important branch of CS
- Use it everyday - Gratitude towards those who made our lives easier!
- Application of DS, Algorithms
 - Heaps, Stacks,...
- Placements?! :)

What is an OS?

Hardware



Applications



Users



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3. Ok. System knows that Pages needs to be started -> where is Pages stored?
4. Pages started - where does the program reside now?
5. I type something in it -> how does it show on the monitor? where is the data that I typed stored? What happens when I save it?
6. Let's start a C program now. Let's write it in an editor. What happens if I open same file in two locations?

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2. OS interfaces with hardware using easy interface

3. OS transforms programs to processes

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OS manages resources - CPU, Memory, Disk, Peripherals

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Logistics

Course Website has all details

<https://nipunbatra.github.io/teaching/os-fall-18/index.html>

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3. Persistence : Store data permanently

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4. **OS-Fun** Can you do something to make `top` show a better name than just `Python3.6`? Can you do it for a C program?

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4. Run vmmap

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Filesystem

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4. Energy efficiency (esp. for mobile systems!)