# CS3510: Operating Systems-1

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Lecture 0

### Who am I?

#### Brief BIO

- Faculty in CSE@IITH
- Post-Doc from University of California, San Diego, USA
- Ph.D. from IIT Madras in Wireless Networking
- Research Interests
  - Converged Cloud Radio Access Networks (5G/Wi-Fi)
  - Softwarization of Networks (SDN/NFV)
  - Internet of Things (IoT), Green ICT, Network Security
- Teaching Interests
  - Computer Networks
  - Wireless Networks
  - Operating Systems
  - Network Security

## Tentative Syllabus

- What is OS?
- System Calls, System Programming
- Process and Thread Management
  - Processes
  - Inter Process Communication
  - Threads

### Reference Theory Books

- Operating System Concepts by Abraham Silberschatz, Greg Gagne, and Peter B. Galvin, 8/9<sup>th</sup> Edition, Wiely Publication.
- Operating Systems: Design and Implementation by Andrew S. Tanenbaum and Albert S. Woodhull, 3<sup>rd</sup> Edition, Prentice Hall.
- Modern Operating Systems by Andrew S. Tanenbaum and BOS, 4<sup>th</sup> Edition, Pearson, 2014.

### Reference Linux/Unix Books

- Linux System Programming: Talking Directly to the Kernel and C Library by Love, Robert
- The Linux Programming Interface: A Linux and UNIX System Programming Handbook by Kerrisk, Michael
- Linux Kernel Development (3rd Edition) by Love, Robert
- Advanced Programming in the UNIX Environment (3rd Edition) by Stevens, W. Richard
- Check out Unix/Linux Reference Books in the Library

### Administration

- ➣ Teaching Hours (Room ): A-LH2
  - Tuesdays: 2:30 to 4pm
  - Fridays: 4 to 5:30 pm
- - Bring your own laptop for evaluations
- Mark TAs
  - HARSHIT PATEL
  - SAKSHAM MITTAL
  - SUPREET SINGH

### Administration: Website

Google Classroom:

https://classroom.google.com/u/0/c/NDY10Tly0TAzMjJa

#### Code: Ops27ny

- The one-stop place for course info, announcements, lecture material
- Assignments are to be uploaded here

## Grading Policy (Tentative)

#### CS3510:

Assignments: 30%

Quizzes: 60%

Attendance: 10%

## Academic Dishonesty Policy

- Submitted work should be your own
- Acceptable collaboration:
  - Clarify problem, syntax doubts, debugging strategy
- Dishonesty has no place in any community
  - May NOT be in possession of some other Group's project
  - May NOT copy code from another group or Internet!
  - May NOT copy in lab and term exams

#### Penalty

- If found guilty of copying assignments (high similarity in submitted assignments), both copy-er and copy-ee will get <0 Marks</li>
- Serious cases like stealing others work/cheating in lab and term exams → FR Grade
- A note is also sent to Dean Academic Office