CSC 361
Computer Networks
Introduction

Wenjun Yang

https://wenjun-y.github.io/csc361

Summer 2026

Instructor

- Dr. Wenjun Yang <wenjunyang@uvic.ca>
  - teacher-scholar & postdoc with CS
  - use UVic Teams first, as email not always reliable
    - to help, always include **[csc361]** in your email subject line
  - office hours: **F 12--1pm**
    - or by appointment
    - **on UVic Teams**
  - research area
    - Networked system for distributed AI
    - https://wenjun-y.github.io/

CSC361's Mighty TAs

Amir Sepahi

Kousar (Kovvy) Malekinasab

Ziming Dong

Lab/tutorial instructors

- Amir, Kovvy, and Ziming
  - their email on Brightspace
- Labs & Tutorials: start next week!
  - We are here to help
    - tutorial lectures
    - assignment help
      - spec go-through, common problems, ...
    - practice problems

(B01) Lab W 12:30 PM – 1:20 PM, ECS 360
(B02) Lab T 9:00 AM – 9:50 AM, ECS 360
(T01) Tutorial W 2:30 PM – 3:20 PM, ECS 104

About the course

- Computer Communications and Networks
  - (A01/2) **TWF 1:30 PM – 2:20 PM, COR A125**
  - Bright: “Summer 2026 CSC 361 A01 A02 X”
    - assignments, gradebook, etc
    - **discussion channel hosted on UVic Teams**
  - prerequisites
    - Algorithms and Data Structures: II (CSC225 or **226**)
    - Computer Architecture (**CSC230** or CENG255)
    - Software Development Methods (**SENG265**)

Message from Undergrad Advisor

- Email: cscadvisor@uvic.ca
- Do not have the prerequisite course(s)?
  - need to obtain a waiver
  - otherwise, prerequisite drop after the first week
- Taking the course more than twice?
  - need to have a letter from the Chair and the Dean
  - otherwise, being dropped from the class
- Make sure you can receive email from Bright!
  - use UVic Teams first

Course evaluation

Assessment for CSC361:		
Programming Assignment 1	10%	Due May 29
Programming Assignment 2	15%	Due June 26
Programming Assignment 3	10%	Due July 28
Assignments Total	**35%**	
Homework Exercises (10 total)	10%	Due Fridays
Midterm 1	10%	June 5
Midterm 2	10%	July 3
Final Exam	35%	TBD

- Must-pass: A minimum score of 50% on the final exam

In-Class Bonus Points

- Randomly prepare bonus questions during classes
- These questions are not quizzes
  - Bonus points are **extra credit** and are added on top of the regular course grade
  - Bonus points are added directly, with no weighting or discount
- The final grade is capped at 100%

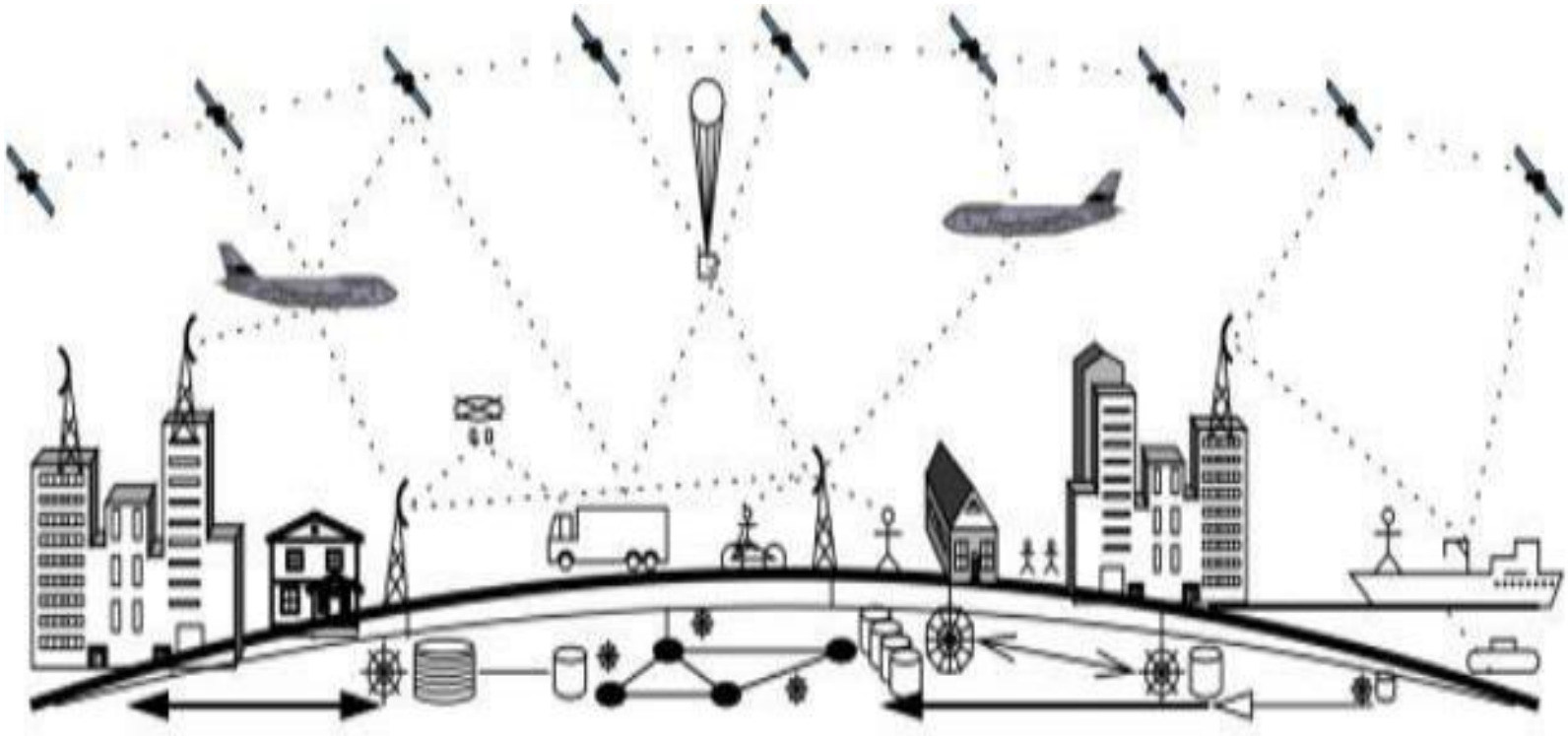
Final = min(100, weighted average of exams and assignments+bonus points)

Why take this course?

- How to use networks
  - Not as a network user
  - But as a network engineer/programmer/researcher!
- How to design/engineer network
  - or design any large-scale, distributed systems
- How to implement network protocols and algorithms

Next generation communication networks?

Ubiquitous network: Space/air/ground/water



- Ubiquitous: anywhere, anytime, any devices
- Future growth driven by new ***communication technologies, paradigms,*** and ***applications***

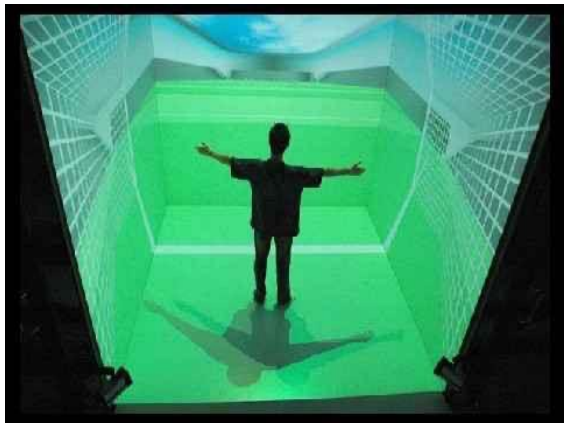
Driven forces

New Applications – Multimedia

IPTV/VoD

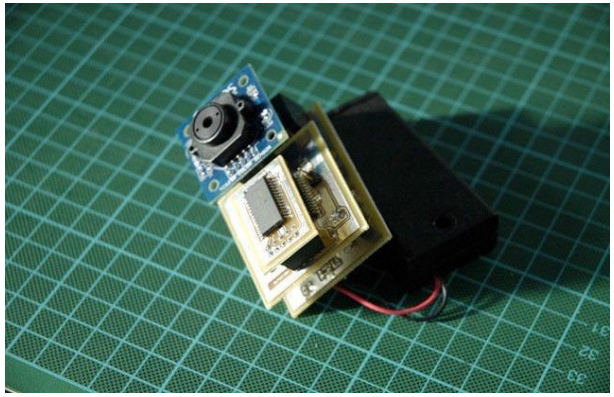
http://www.academyconfidential.co.uk/images/3D_01.jpg

3D-TV



http://youreyeonthefuture.files.wordpress.com/2009/09/virtual-reality-3.jpg

Virtual Reality



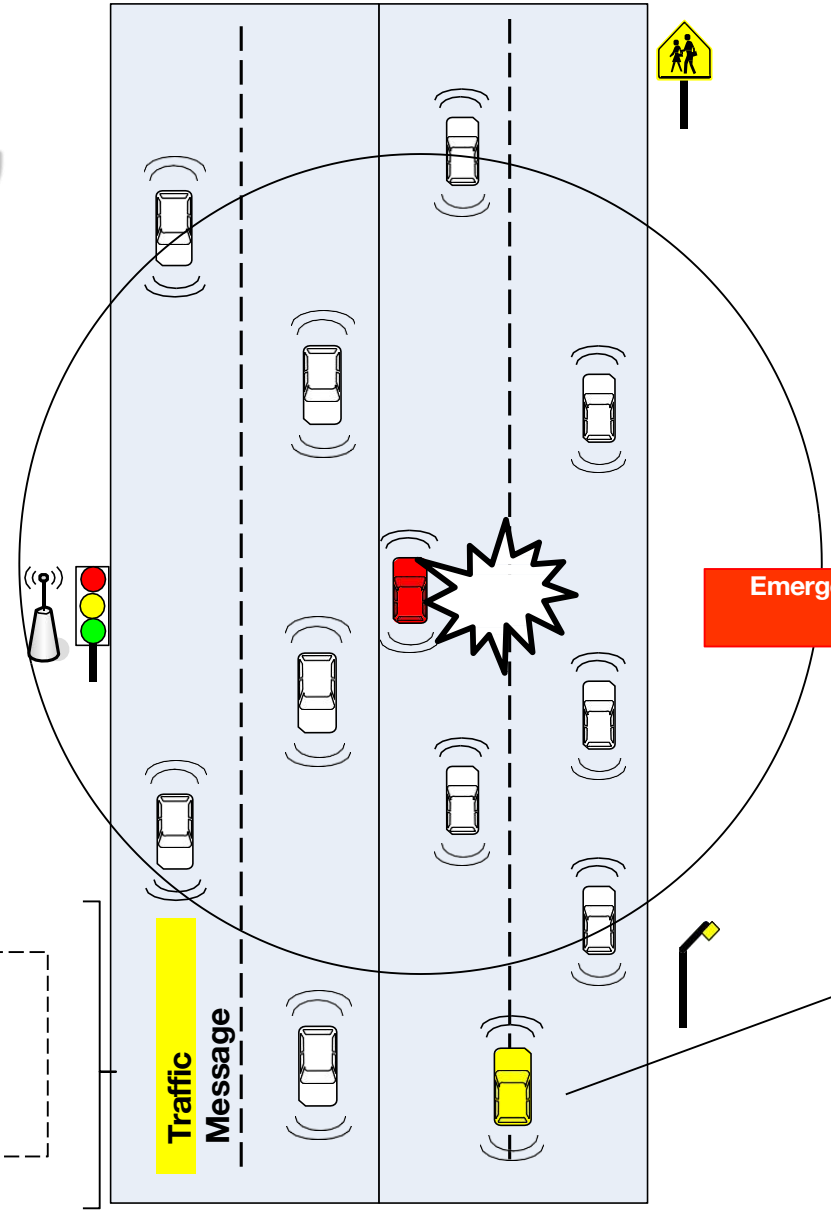
http://www.bash-design.com/pic/one_pixel_camera_1.png

One-pixel camera using compressive sensing

New Applications – VANET

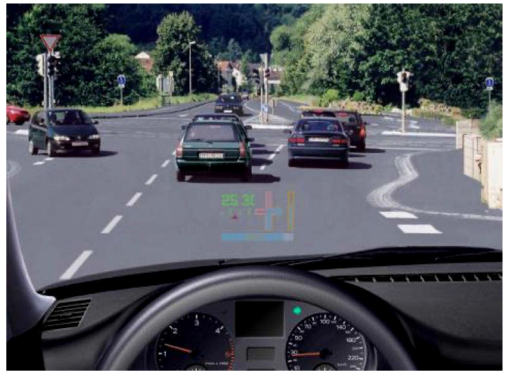
RSU

Hazard warning etc



Emergency Message

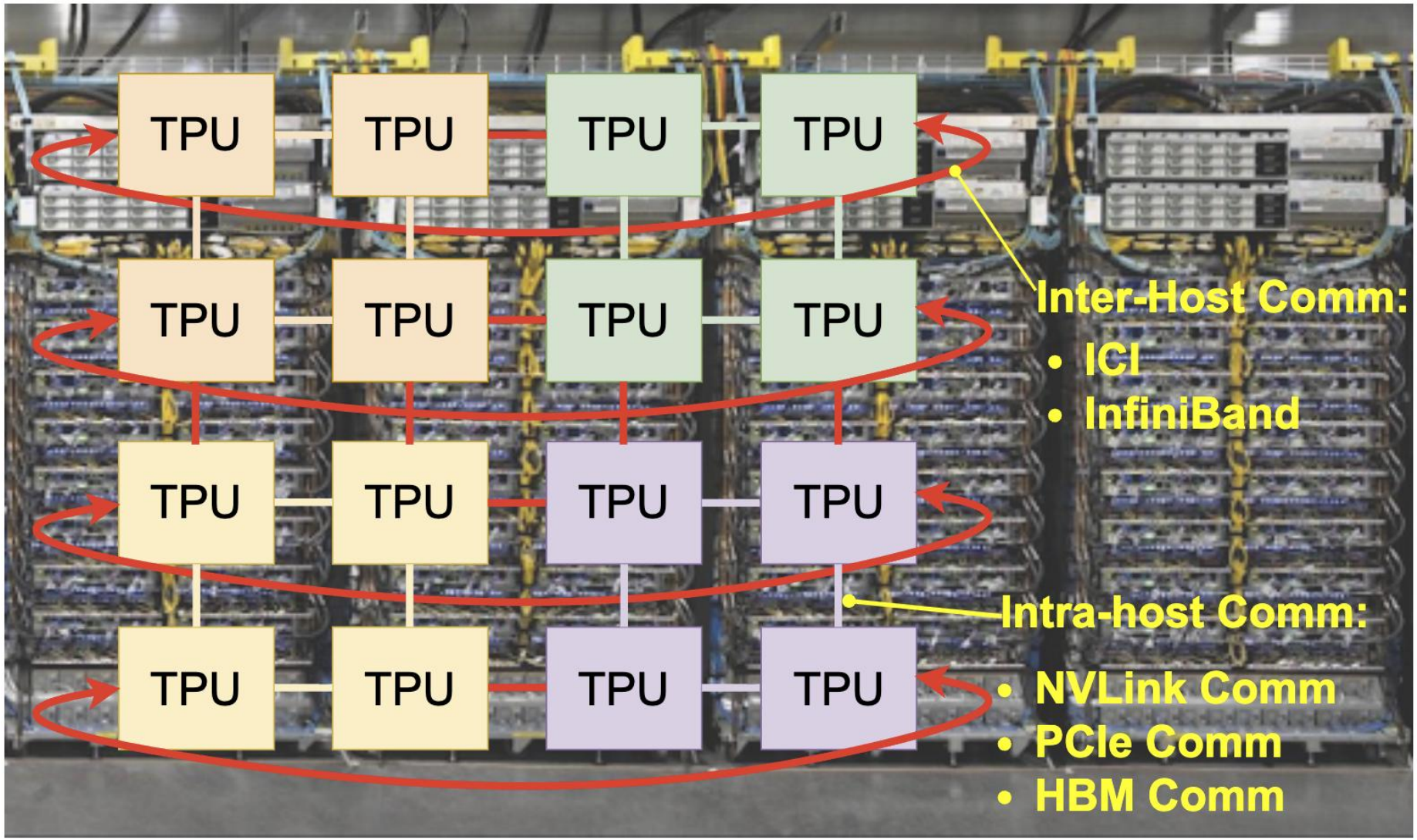
Position, current time, direction, velocity, accelerator, etc.



New Applications – Human-cyber-physical interactions

New applications for real-time interactions between human, cyber systems, physical systems

Large-scale AI



Next lecture

- An overview on computer networks

  read K&R: Computer Networking

  - Chapter 1 (except 1.6)