

Spring 2020 Mobile Social Networks

- **Instructors:** [Chih-Ya Shen](#) (National Tsing Hua University), [Chih-Wei Huang](#) (National Central University), [Tung-Wei Kuo](#) (National Chengchi University), [Chin-Ya Huang](#) (National Taiwan University of Science and Technology)
- **Coordinator:** [Tung-Wei Kuo](#) (National Chengchi University)
- **Time and Location :** See the syllabus below.
- **Office Hour:** By appointment
- **TA:** Mluleki Mtande (mlumtande@gmail.com)
- **TA Office Hour:** By appointment

Course Description

Mobile Social Networks is an emerging and exciting new research area, and the course will consist of the presentations in the following directions:

1. *Introduction on Mobile Communication and SDN*
2. *Introduction on Mobile Social Networks*
3. *Random Graphs and Small World Properties*
4. *Multimedia in Mobile Social Networks*

In addition to presentations given by the lecturers, students will present papers on mobile social networks.

Textbook:

Slides made by the lecturers.

References:

Related papers that can be found in ACM Digital Library, IEEE Xplore, or other online databases.

Teaching Methods:

- *Presentations done by lecturers*
 - *Student presentations*
 - *Discussion*
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Syllabus:

Tentative detailed topics to cover are:

1. *Wireless communication: Modulation and MAC protocols*
 2. *SDN and Virtualization*
 3. *Random Graphs in Social Networks*
 4. *Small World Properties*
 5. *Socially Aware Computing: Concepts, Technologies, and Practices*
 6. *Ephemeral Social Networks*
 7. *Multimedia in Mobile Social Networks*
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Grading:

1. *Midterm exam: 25%*
2. *Final exam: 25%*
3. *1st presentation: 20%*
4. *2nd presentation: 20%*
5. *Presentation participation: 10%*

Schedule:

Week	Topics	Lecturer	Note
2020/02/20	No class		
2020/02/27			
2020/03/05 (Thur)	Introduction to Wireless Communication	Tung-Wei Kuo	1400-1700 @ N107, IIS, AS
2020/03/06 (Fri)	Modulation	Tung-Wei Kuo	0900-1200 @ N107, IIS, AS
2020/03/12 (Thur)	MAC Protocol	Tung-Wei Kuo	1400-1700 @ N107, IIS, AS
2020/03/13 (Fri)	Error Correction and Detection Code	Tung-Wei Kuo	0900-1200 @ N107, IIS, AS
2020/03/19 (Thur)	Basic Graph Theory and Small World Properties	Tung-Wei Kuo	1400-1700 @ N107, IIS, AS
2020/03/27 (Fri)	SDN and Virtualization (I)	Chin-Ya Huang	0900-1200 @ N101, IIS, AS
2020/04/03	Spring Break_No Class		
2020/04/10	SDN and Virtualization (II)	Chin-Ya Huang	0900-1200 @ N101, IIS, AS
2020/04/17	Midterm Exam		0900-1200 @ N101, IIS, AS
2020/04/24	Socially Aware Computing: Concepts, Technologies, and Practices (I)	Chih-Ya Shen	@ Delta 601, NTHU On Fridays 0900-1200
2020/05/01	Socially Aware Computing: Concepts, Technologies, and Practices (II)	Chih-Ya Shen	
2020/05/08	Introduction to Machine Learning Approaches for Mobile Social Networks (I)	Chih-Ya Shen	
2020/05/15	Introduction to Machine Learning Approaches for Mobile Social Networks (II)	Chih-Ya Shen	
2020/05/22	Introduction to Multimedia Communications for Mobile Social Networks (I)	Chih-Wei Huang	0900-1200 (Fri) @ N107, IIS, AS
2020/05/29	Introduction to Multimedia Communications for Mobile Social Networks (II)	Chih-Wei Huang	0900-1200 (Fri) @ N107, IIS, AS
2020/06/05	Multimedia Coding Fundamentals	Chih-Wei Huang	0900-1200 (Fri) @N107, IIS, AS
2020/06/12	Optimization for Mobile Networks	Chih-Wei Huang	
2020/06/19	Final Exam		