



HA NOI UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATION AND COMMUNICATION TECHNOLOGY

Biometric Authentication Systems

Chapter 0: General information

About me

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General information

- Course name:

Biometric Authentication Systems

- Code: IT4432E
- Credit: 2(2-1-0-6)
 - Lecturer: 30 hours
 - Capstone project: 15 hours
 - Experiments: 0 hours

Evaluation

- Mid-term (0.3)
 - Capstone project evaluation
 - Program
 - Report
 - Presentation
 - Bonus
- Final term: written exam (0.7)

Rules

- In-class attendance
- Telephone:
 - turn-off or in vibration mode
- Come in/out if necessary
 - No need for asking permission
 - Without noise

Course Content

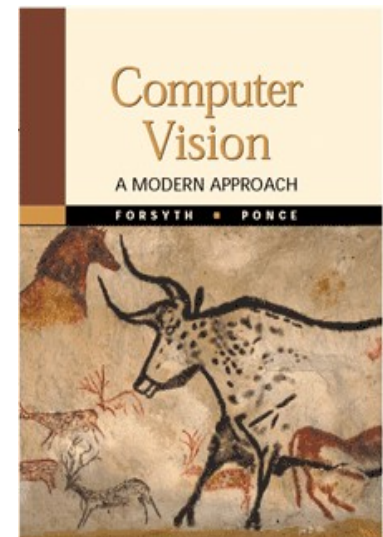
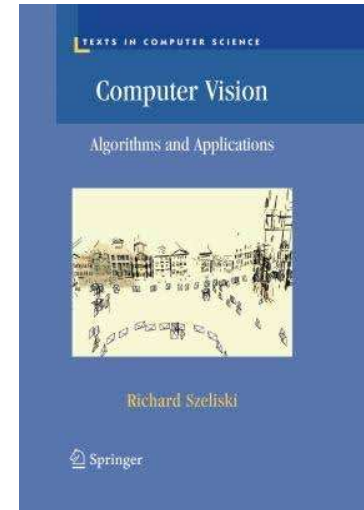
- ***Chapter 1. Introduction***
- ***Chapter 2. Image Processing***
- ***Chapter 3. Feature detection and matching***
- ***Chapter 4. Introduction to semantic segmentation and object detection problems***
- **Chapter 5. Biometrics and Biometrics system Overview**
- **Chapter 6. Fingerprint**
- **Chapter 7. Iris**
- **Chapter 8. Face**
- **Chapter 9. Gait**
- **Chapter 10. Other biometrics modalities**

How to learn?

- Class attendance
- Reading additional articles / books
- Practice your-self (OpenCV, ...)
- QA

Reference books

- [1]. Richard Szeliski (2011). Computer Vision: Algorithms and Applications. Springer.
<http://szeliski.org/Book/>
- [2]. David A. Forsyth, Jean Ponce (2011). Computer Vision: A modern Approach. Pearson
- [3]N. V. Boulgouris (Editor), Konstantinos N. Plataniotis (Editor), Evangelia Micheli-Tzanakou (Editor), Biometrics: Theory, Methods, and Applications, Wiley-IEEE Press, 2009
- [4]Sébastien Marcel, Mark S. Nixon, Julian Fierrez, Nicholas Evans. Handbook of Biometric Anti-Spoofing: Presentation Attack Detection, Springer, 2019
- [5]Mayank Vatsa (Editor), Richa Singh (Editor), Angshul Majumdar (Editor), Deep Learning in Biometrics, CRC Press; 1st edition (March 12, 2018)





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**Thank you for
your attention!**



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