Course Matters

Chia-Ping Chen

Professor National Sun Yat-sen University Department of Computer Science and Engineering

Linear Algebra

Syllabus

- System of Linear Equations
- Vector and Matrix
- Space
- Orthogonality and Projection
- Determinant
- Eigenvalue Problem
- Positive-definite Matrix

CLASS SMART

- Grading participation/quiz (20) midterm (30) final (50)
- Website slides, announcements
- LINE group
- TA
- Tutor

APPLICATION

- Artificial Intelligence (AI)
 - Machine learning
 - Deep learning
- Multimedia Information Technology (MIT)
 - audio
 - text
 - image

$$\overset{n \times m}{\mathbf{V}} = \overset{n \times r}{\mathbf{W}} \overset{r \times m}{\mathbf{H}}$$

Lee and Seung, "Learning the parts of objects by non-negative matrix factorization", Nature, 1999

