

# COMP0137: MACHINE VISION Table of Contents

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- Models with loops

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§ PCA

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  - § Intrinsic (Calibration)
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- **15: Transformation models:**

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- Learning intrinsic, extrinsic, inferring 3D points of transformation models with homographies
- Robust estimation of transformations

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- Fundamental Matrix
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- two-view reconstruction
- dense reconstruction
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- shape template model
- statistical shape models
- probabilistic principal components analysis (PPCA)
- Gaussian process latent variable model (GPLVM)
- articulated models (aka kinematic chain)

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- Extended Kalman filters
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- Feed-forward net
- Types of layers
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- Auto-encoders
- Practicalities

- **N+1: Neural Nets architecture:**

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- Network design choices
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- Network architectures
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