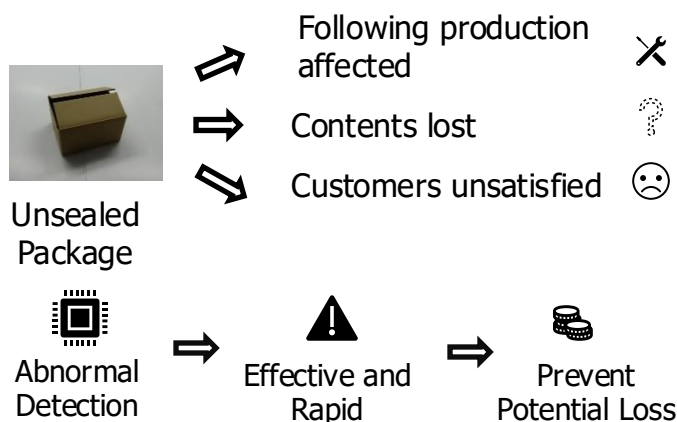


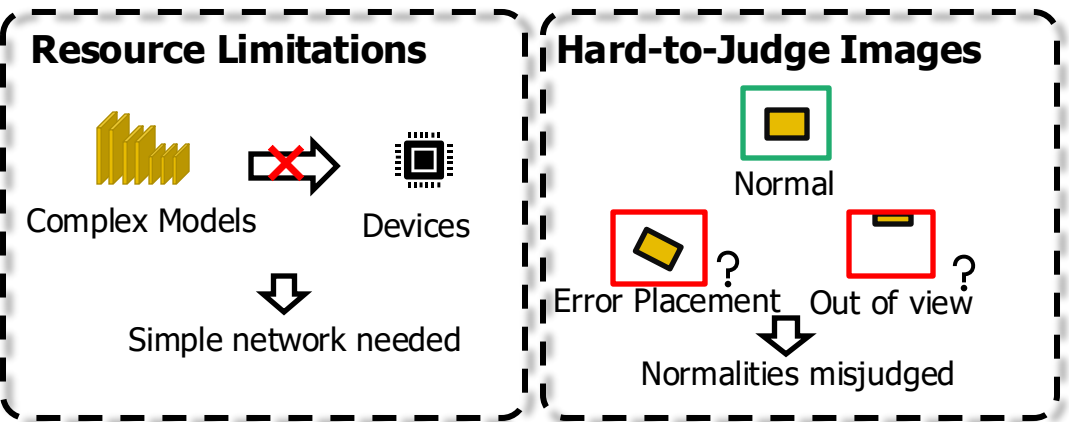
Spatio Temporal Feature and Consistency Compensation Based Abnormal Detection for Unsealed Packages Inspection

陳 思宏 池永研究室 修士課程修了

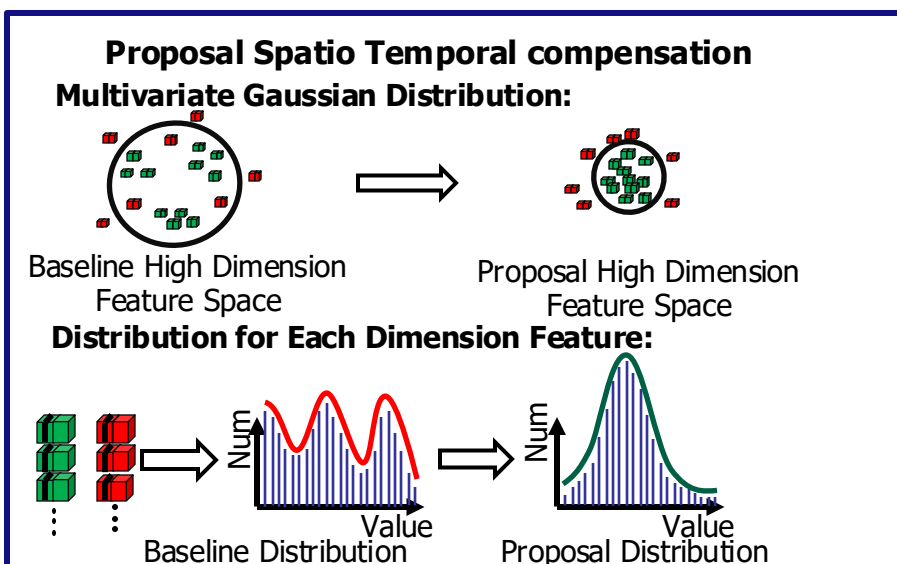
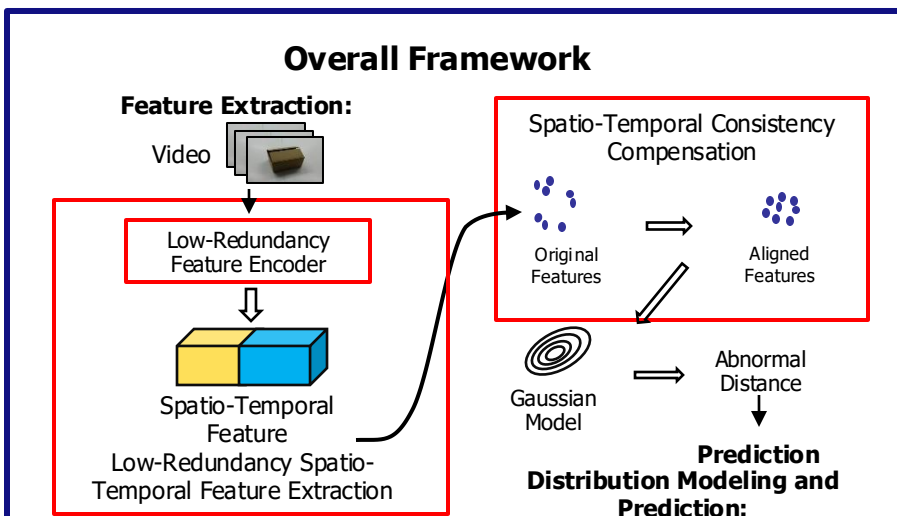
Background



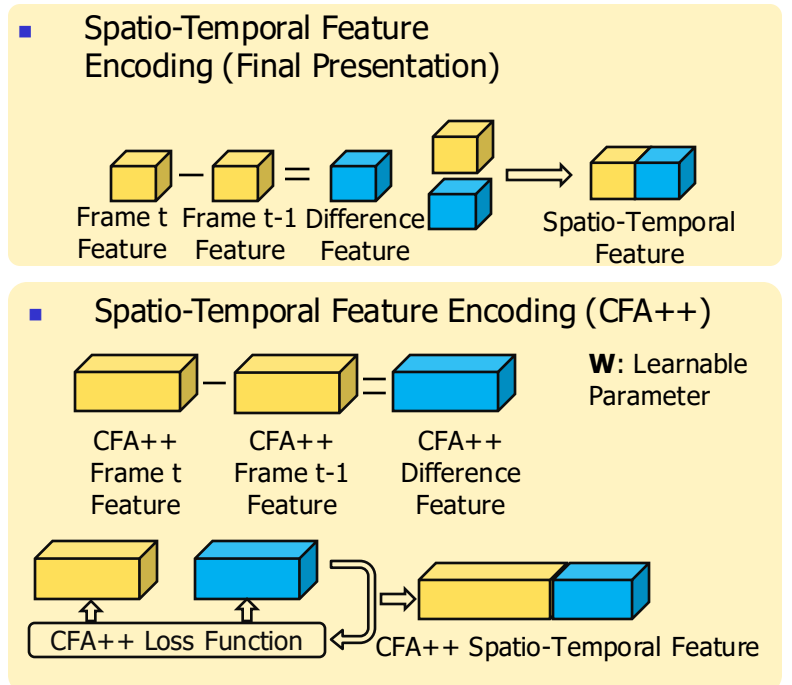
Challenges



Proposals



Proposal Spatio-Temporal Feature Encoding



Proposal: 50

Video

50 × 640 × 480 × 9

Proposal total: ~0.22GFLOPS/Frame

Experiment Results

Method	Modeling	AUROC
CFA++	Memory Bank	0.982
Gaussian AD	Gaussian Model	0.979
CFA++ + Proposal	Memory Bank	0.985
Gaussian AD + 3D-CNN	Gaussian Model	0.845
Gaussian AD + 3D-CNN + Proposal	Gaussian Model	0.982

Conclusion

- The proposed method achieves a video-level AUROC of 0.985, higher than those of related
- The method requires a per-frame computational cost of approximately 0.22 GFLOPs for 640×480 video inputs

