

# Graph Convolutional Tracking (GCT)

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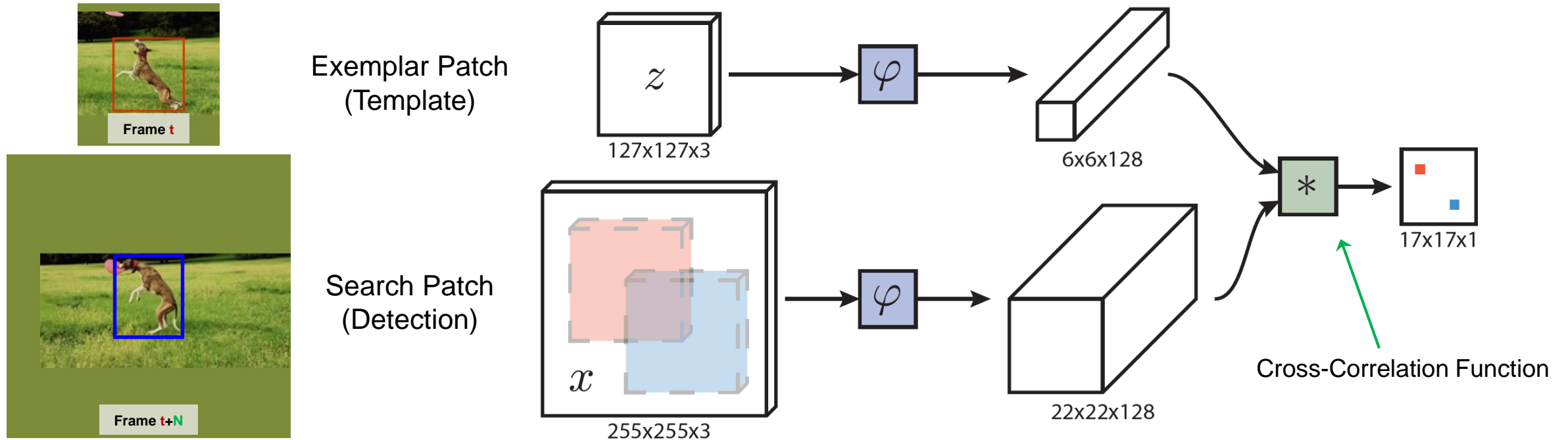
# Visual Tracking **in Computer Vision**

- Localize a single “*target-of-interest*” on a given video (image sequence)



# Siamese Tracking (SiamFC)

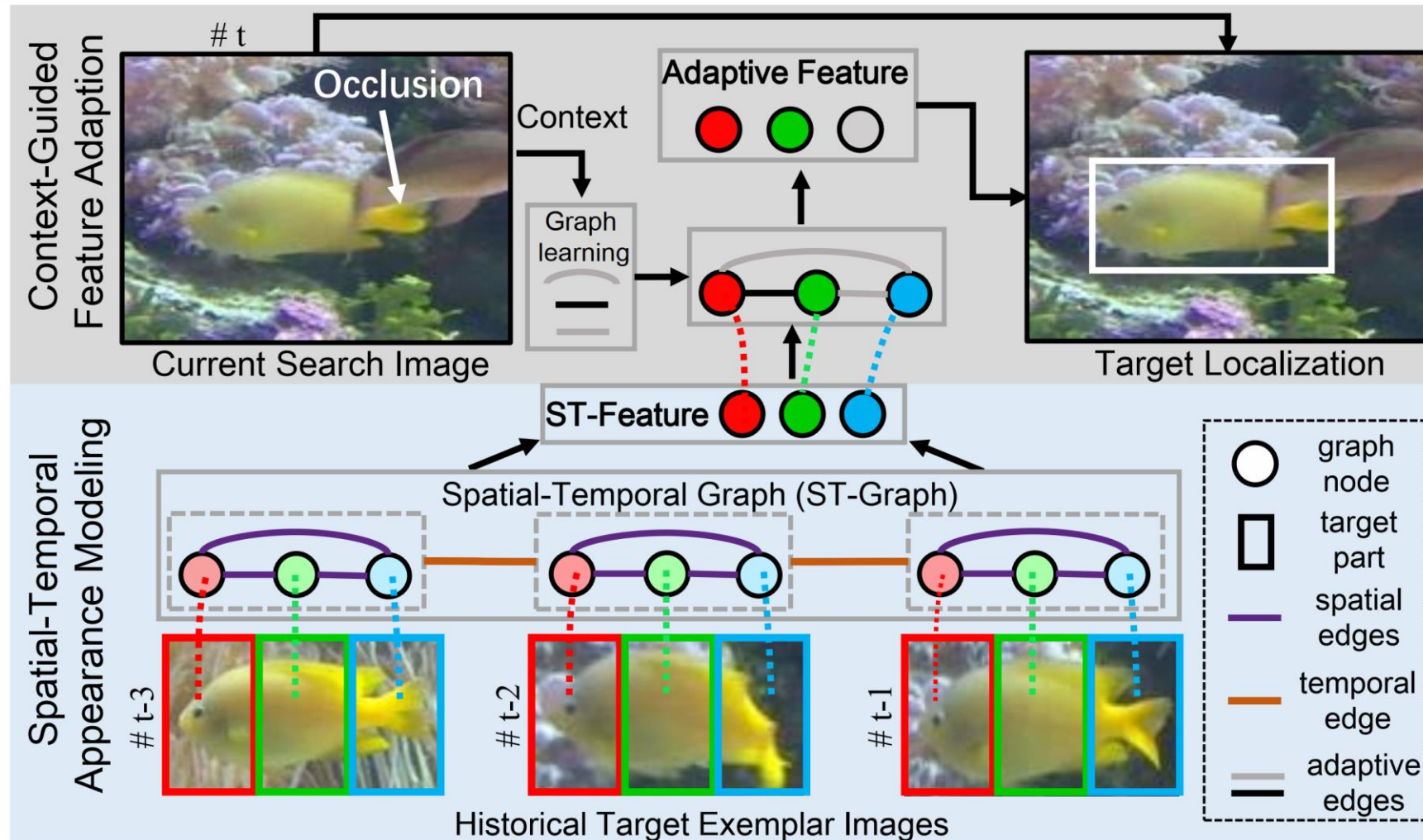
- **SiamFC** : *Fully-Convolutional Siamese Networks for Object Tracking (ECCVw 2016)*



$$f(z, x) = g(\varphi(z), \varphi(x)) = \varphi(z) * \varphi(x) + \underbrace{b \cdot \vec{1}}_{\text{bias term}}$$

# Proposed Framework (GCT) : Motivation

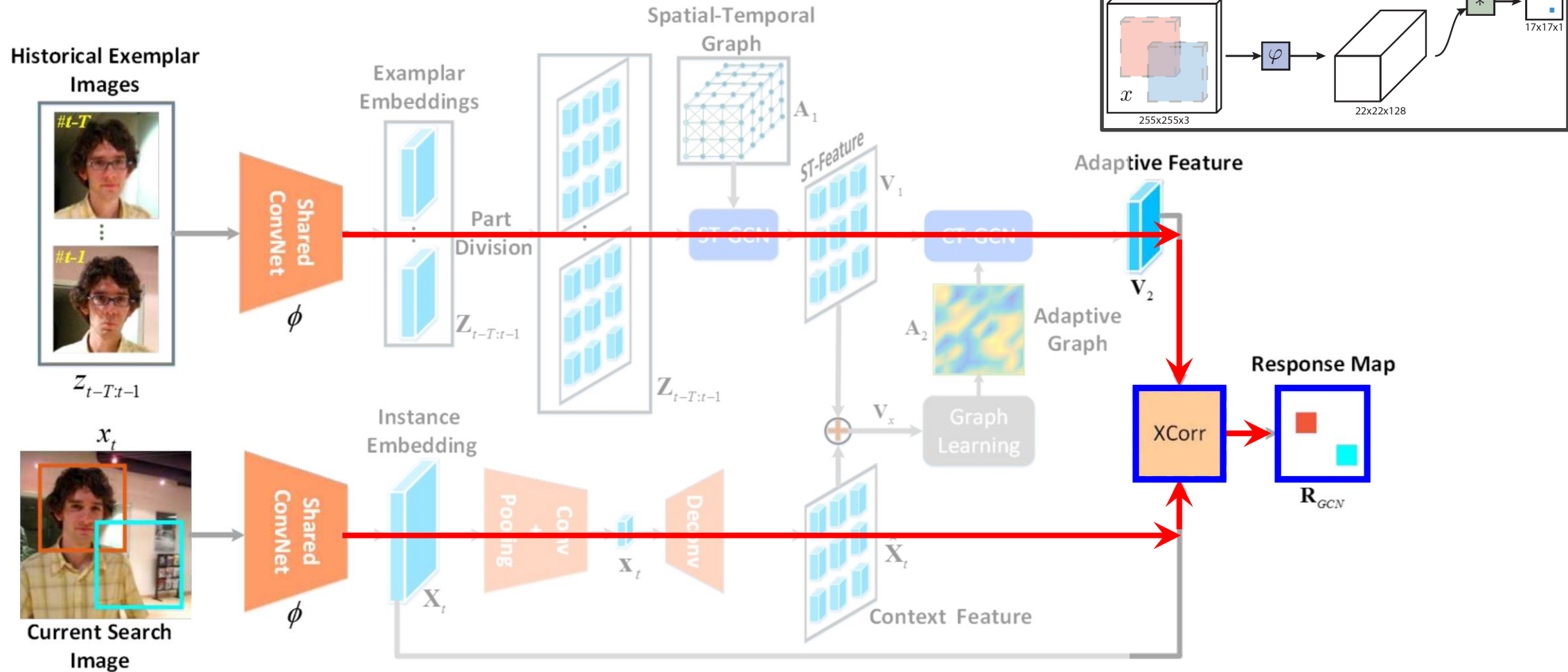
- **GCT** : *Graph Convolutional Tracking (CVPR 2019)*



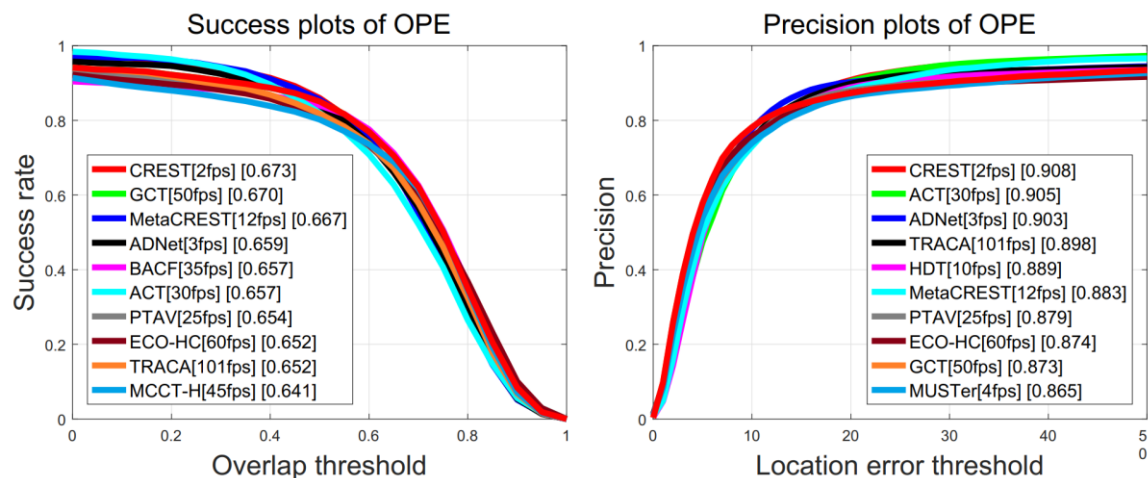


# Proposed Framework (GCT) : SiamFC-like Structure

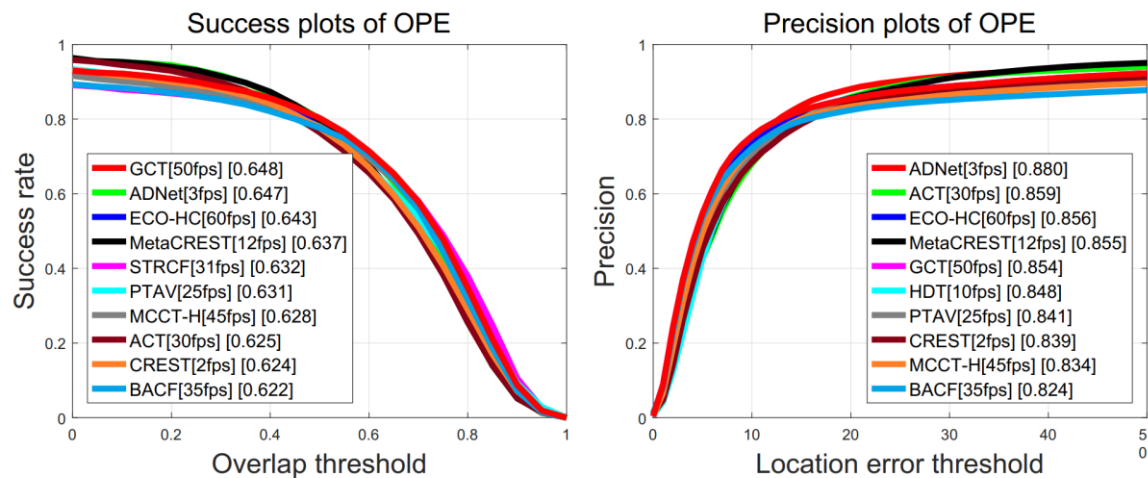
- **GCT** : Graph Convolutional Tracking (CVPR 2019)



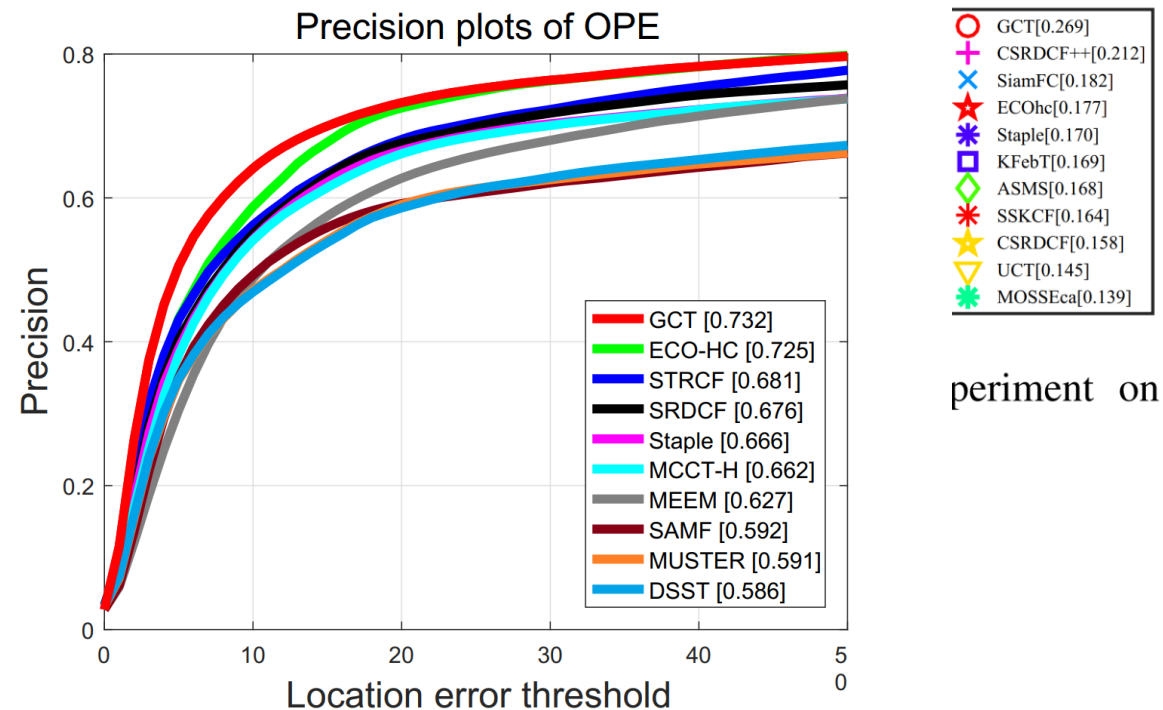
# Experimental Results : Benchmark Results



(a) Results for OTB-2013 benchmark [70]



(b) Results for OTB-2015 benchmark [71]



the UAV123 benchmark [40]. Our  
s favorably.

*Thank You!*