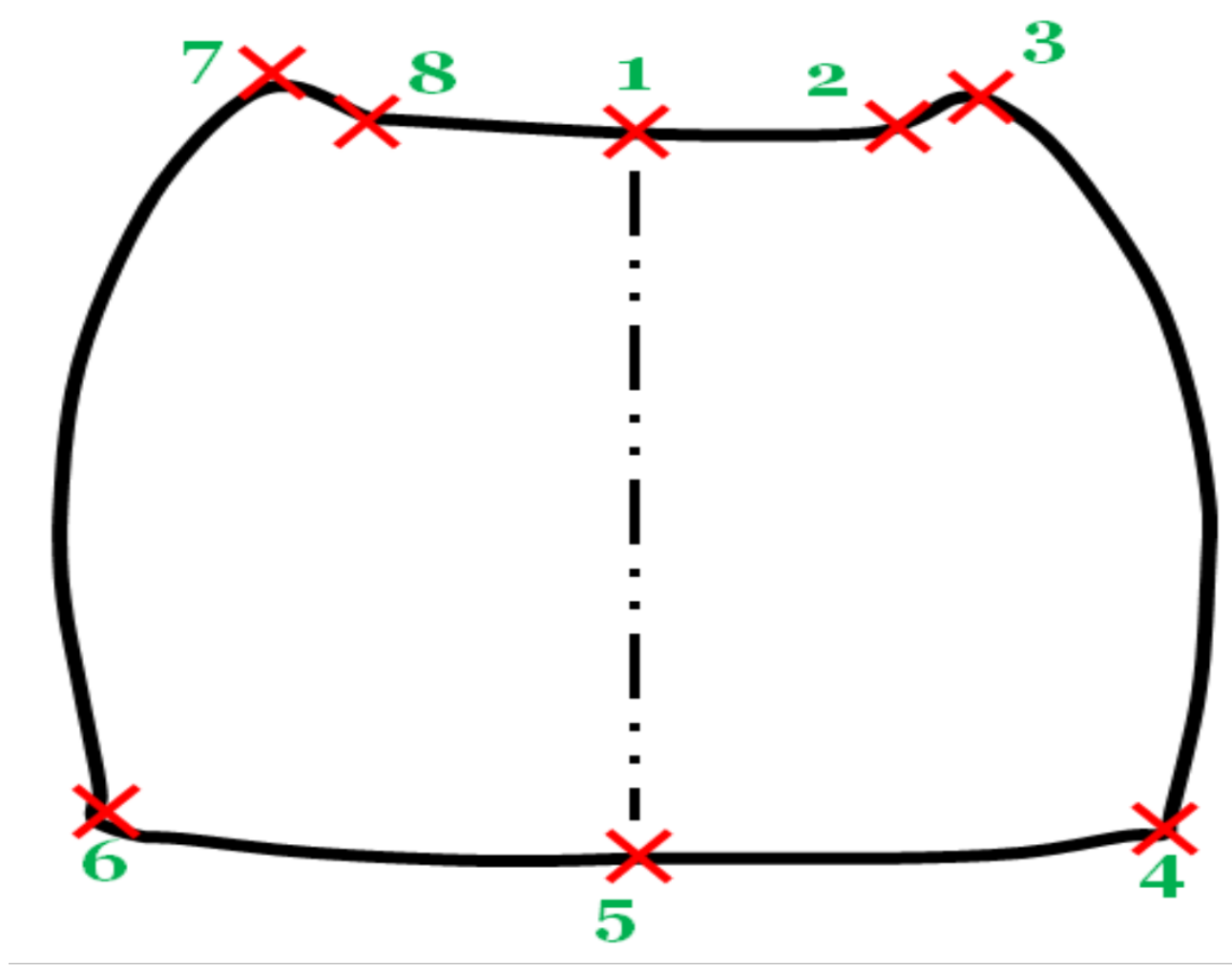# EB-Net for landmarking on pronotum images

Le Van Linh - Beurton-Aimar Marie, Zemmari Akka, Parisey Nicolas

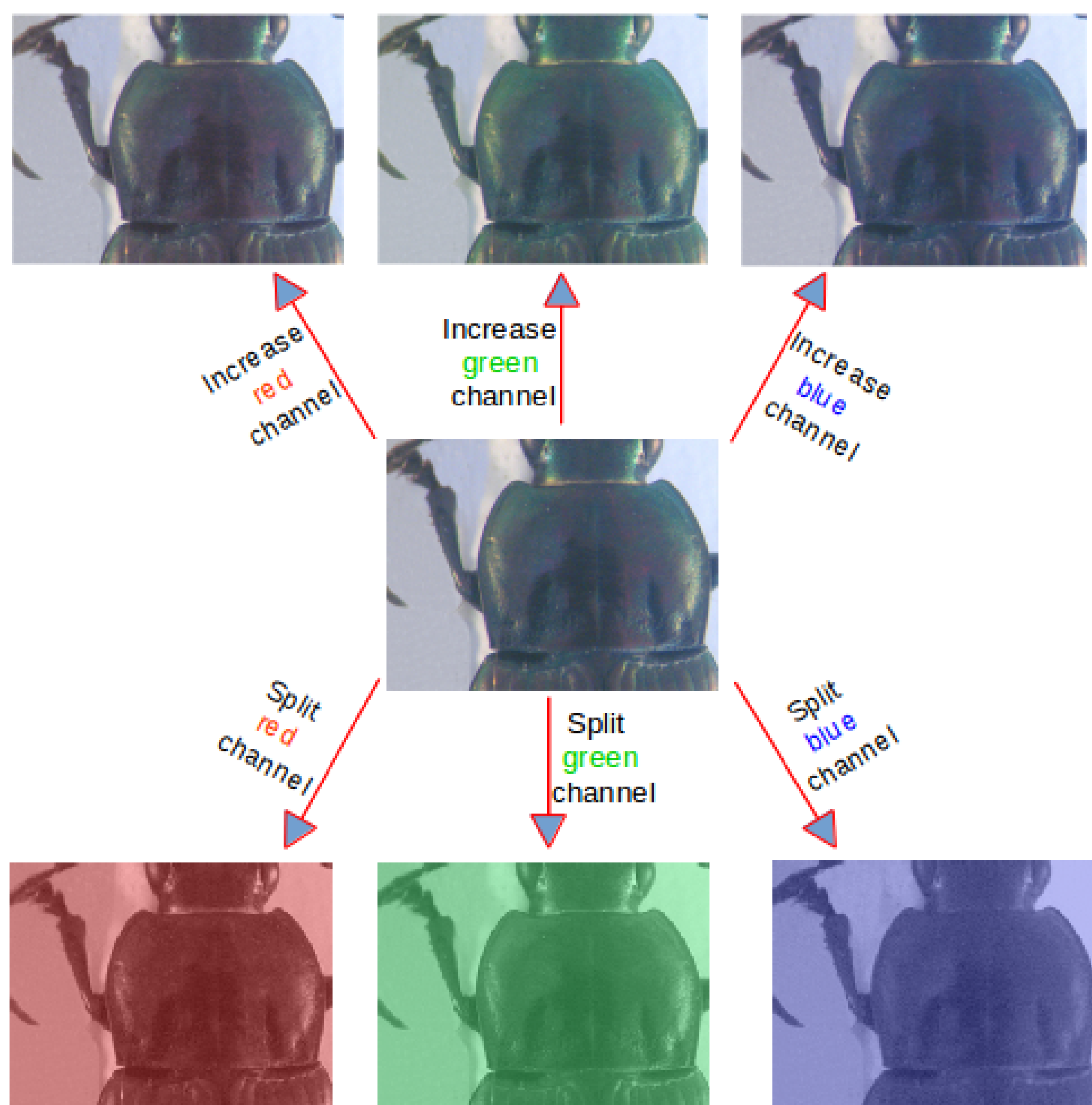*I&S - Univ. Bordeaux, LaBRI, France*

LaBRI

Pronotum and landmarks

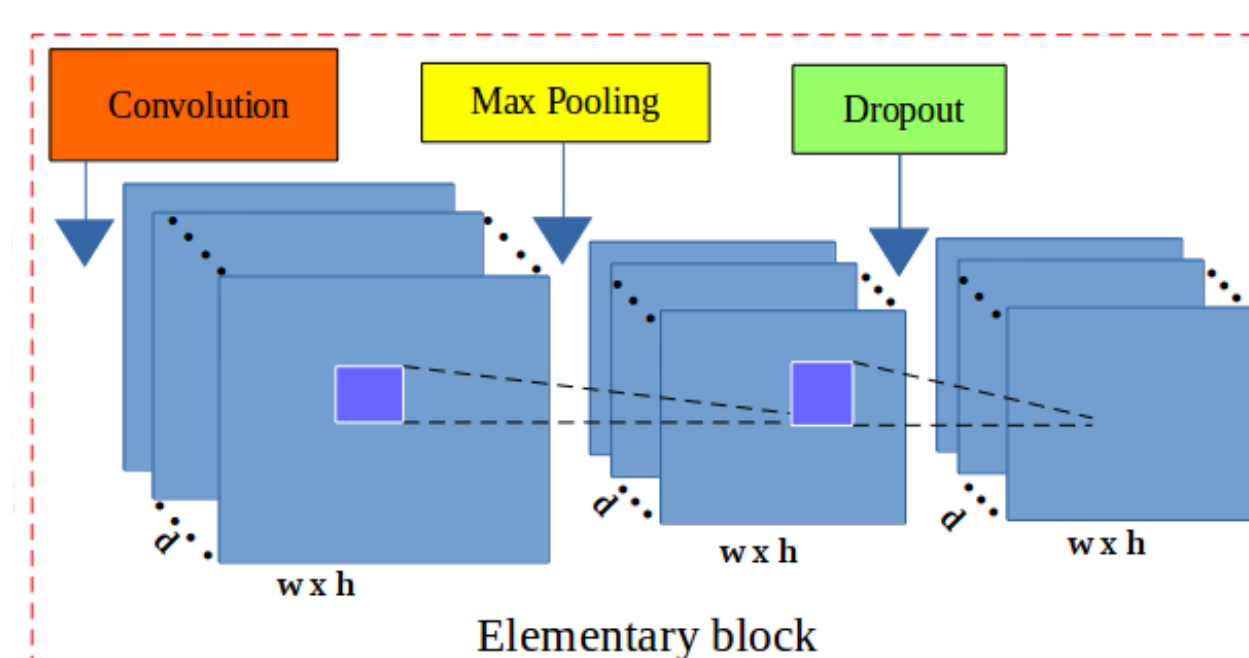**How to locate the landmarks automatically?**

Dataset augmentation

1. Changing the value of one color channel in the original image
2. Separating the channels of original image
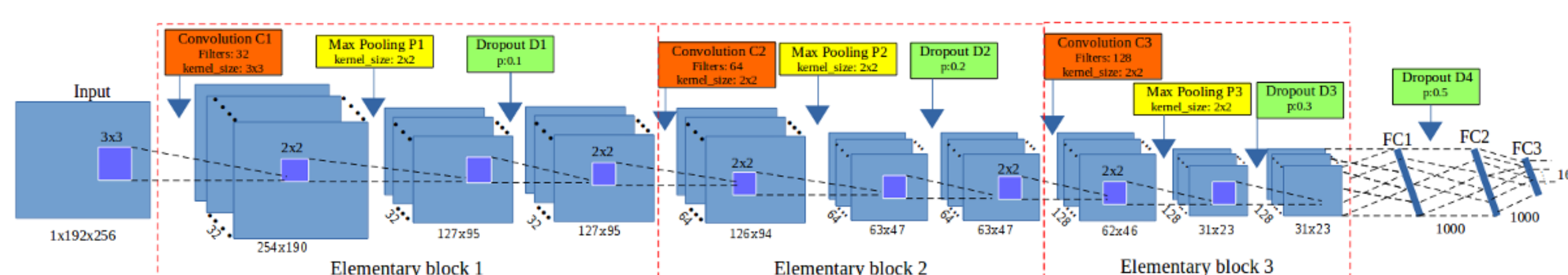3. In total: $293 \times 7 = 2051$ images

Elementary block

An elementary block is consists of:
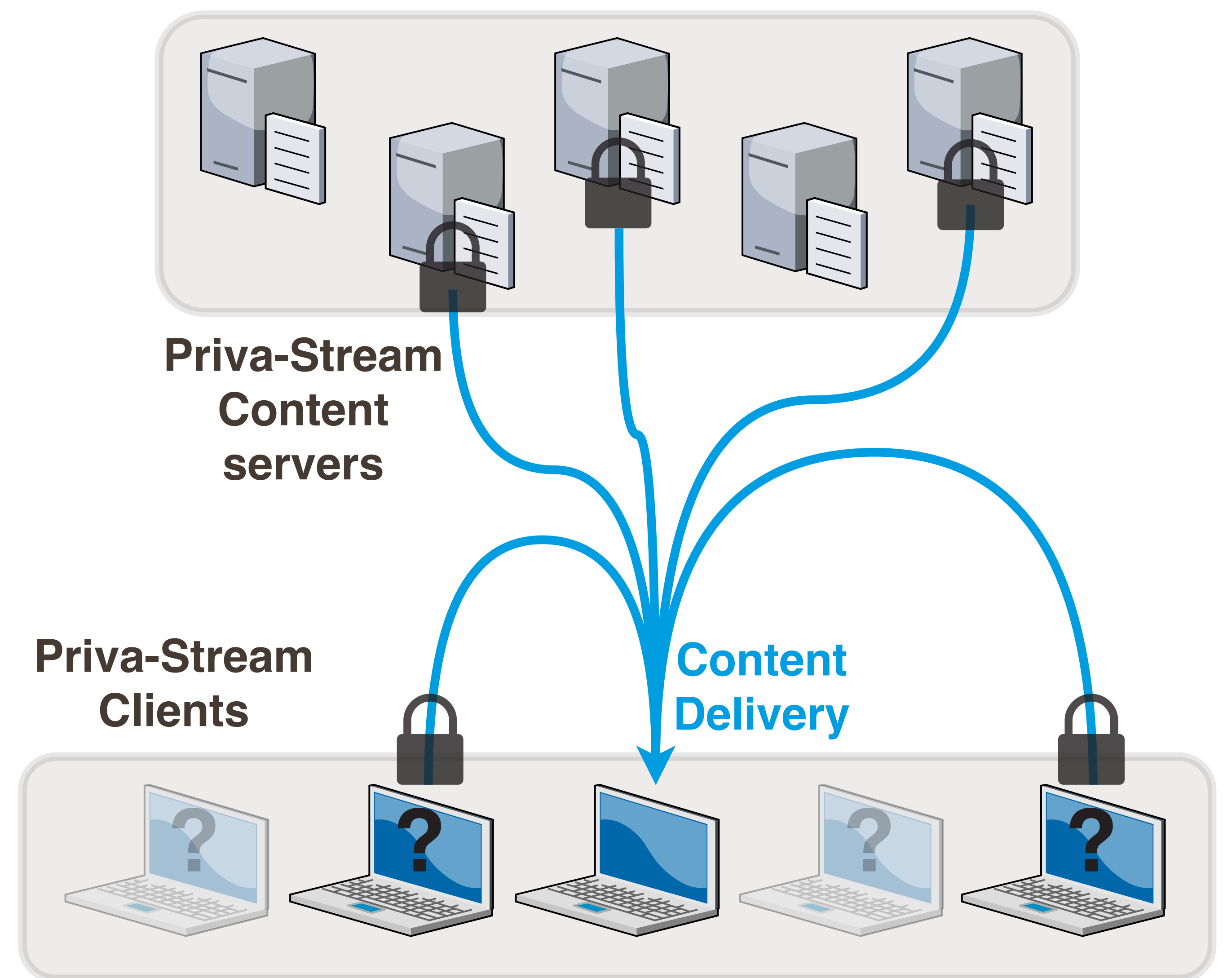► A Convolutional layer
► A Max-Pooling layer
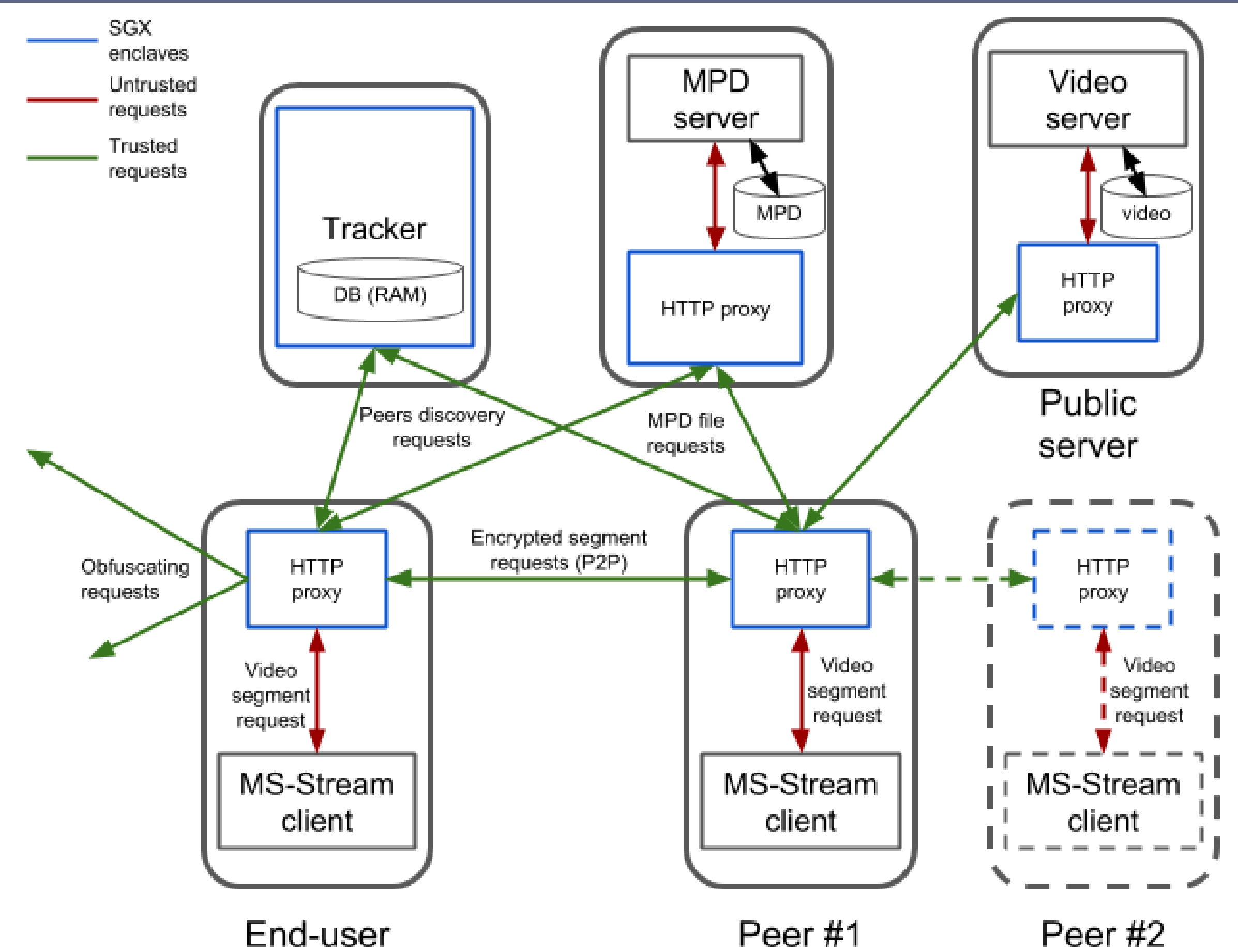► A Dropout layer

Network architecture

The proposed network includes:
► Three elementary blocks
► Three fully connected layers
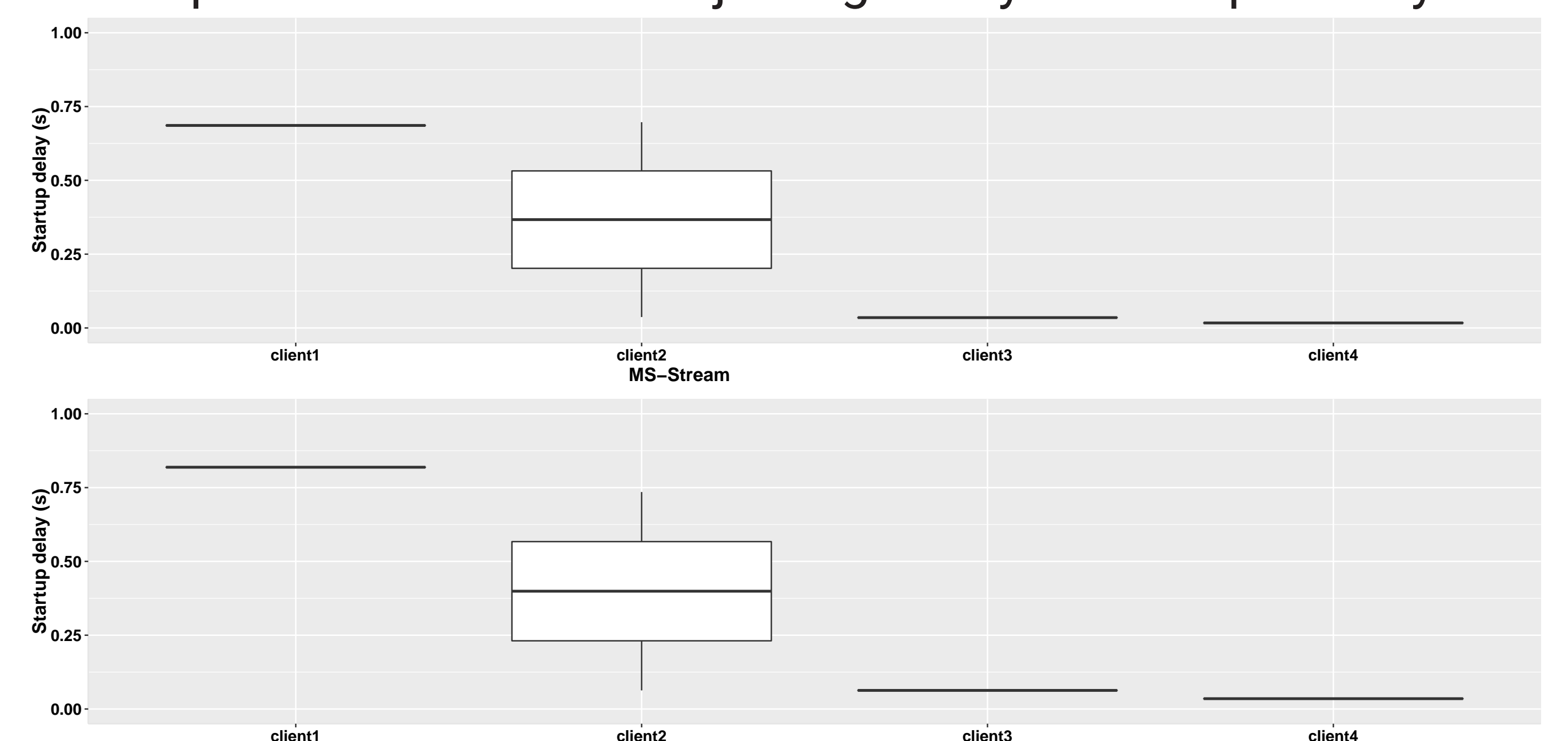► A Dropout layer

Training curves

Priva-Stream Content servers

Priva-Stream Clients

Content Delivery

Evaluation progresses

- SGX enclaves
- Untrusted requests
- Trusted requests

End-user · Peer #1 · Peer #2

Conclusion

Experiment: Four clients joining the system sequentially

Startup delay (s) - MS-Stream (top) vs PRIVA-STREAM (bottom)

Bibliography

► Reliability, QoE and scalability
  MS-Stream: Multiple-Source adaptive streaming over HTTP
► Incentive to contribute
  Rewarding: contributing users get a higher quality
► End-users privacy
  TEE (SGX): encryption, NAT and anonymity

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