

THEO Technologies

Reference implementation of High Efficiency Streaming Protocol (HESP) on game console, RDK, etc.

Internship

Leuven, Belgium (Europe)

THEO's vision & mission

[THEOplayer](#) is the industry-leading video playback partner for delivering a world-class viewer experience with HLS and MPEG-DASH across different platforms and devices. With our video player solutions for VR/360, web, mobile web, Android SDK, iOS SDK and Chromecast Receiver App SDK, THEOplayer is a trusted video player partner for some of the world's premier telcos, broadcasters and publishers. THEOplayer has proven compatibility with industry-leading solutions for streaming, advertising, DRM and server side ad insertion. Our worldwide customer base includes companies such as CNN, Telenet, NBC, Twitter, Swisscom, France Télévisions, Telia, CERN, Nasdaq, Hudl, Cisco and Softbank. In 2017, 2018 and 2019 THEOplayer has won the Streaming Media Readers' Choice Award for Best Video Player Solution/SDK. THEO Technologies is one of the fastest growing technology companies in Belgium. We are an ambitious team who have been disrupting the global online video industry since 2012. THEO Technologies has offices in Leuven (HQ - Belgium), Singapore (Singapore), New York and San Francisco (USA).

With video streaming on the rise, video player solutions face a growing need for an efficient and scalable approach which is adaptable to variable network conditions. Viewers are becoming increasingly demanding when it comes to streaming online video, as latencies and zapping times are expected to be as low as in classic (or even analogue) technologies. Moreover the approach needs to be scalable, efficient and tolerant to different network conditions. Existing streaming does not meet all of these requirements. Either the techniques are not sufficiently scalable (such as webRTC), either the latencies and zapping times are too high (as with HLS and MPEG-DASH). THEO Technologies designed a streaming protocol that combines the scalability of HTTP Adaptive Streaming technologies such as HLS with sub second latency and zapping times. This new protocol is called HESP – High Efficiency Streaming Protocol.

Description internship

This internship focuses on **extending the number of end devices on which the HESP protocol is supported**. The following devices and platforms are targeted: Android TV, RDK (Reference Design Kit, a set-top box middleware platform used by US operators and Telenet / Liberty Global), game consoles (Sony PS, Microsoft Xbox), smart TV platforms, ...



The trainee will first get acquainted with the HESP protocol and with the target platform. Next the HESP protocol will be implemented on the target platform. If time allows a user interface around the player will be implemented as well. During the internship, the trainee will learn how streaming video works and how streaming players work. The trainee will learn the target platform and will learn how to develop software for the target platform.

Does this sound interesting to you?

Please send your resume and cover letter to careers@theoplayer.com. We look forward to hearing from you.