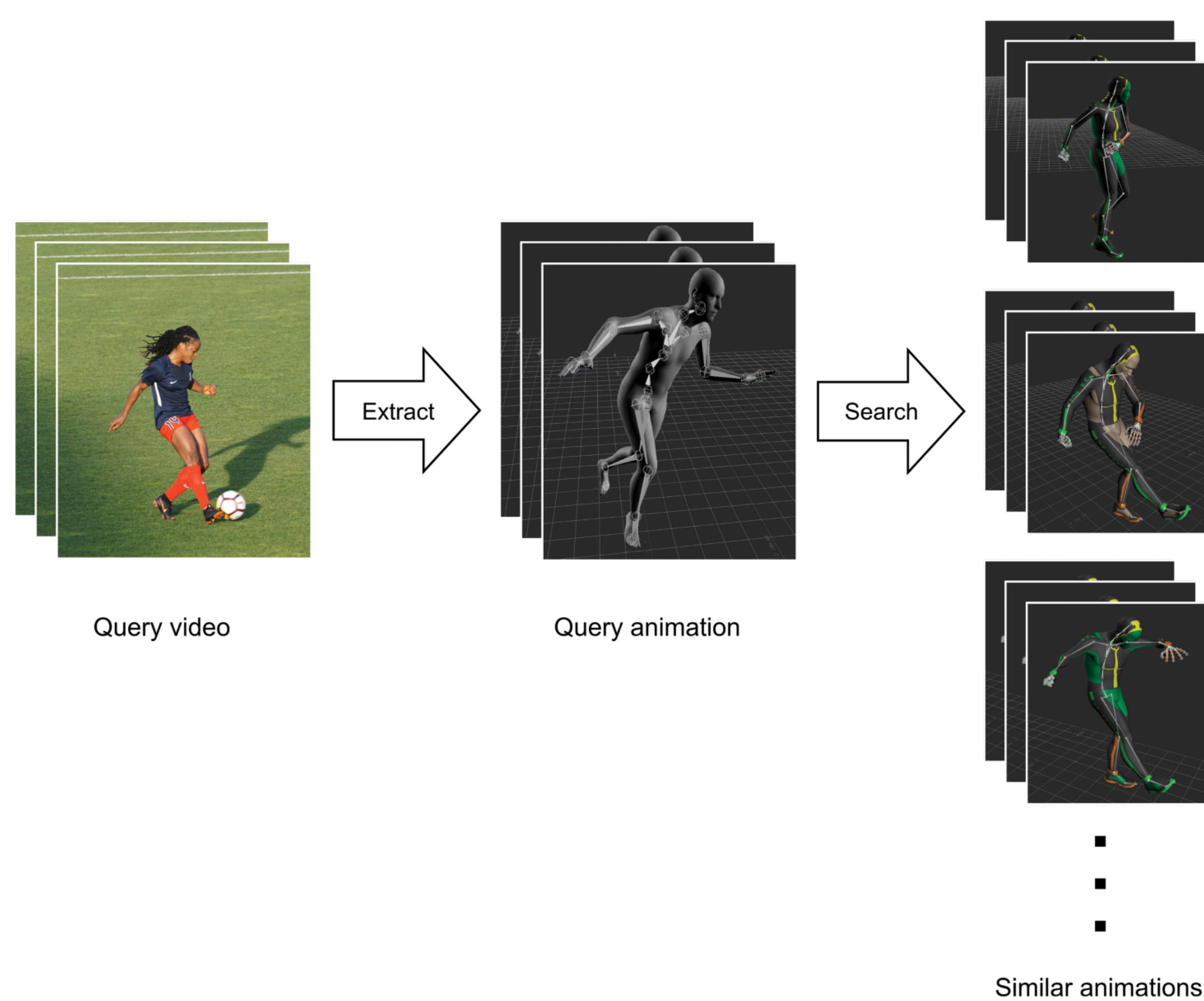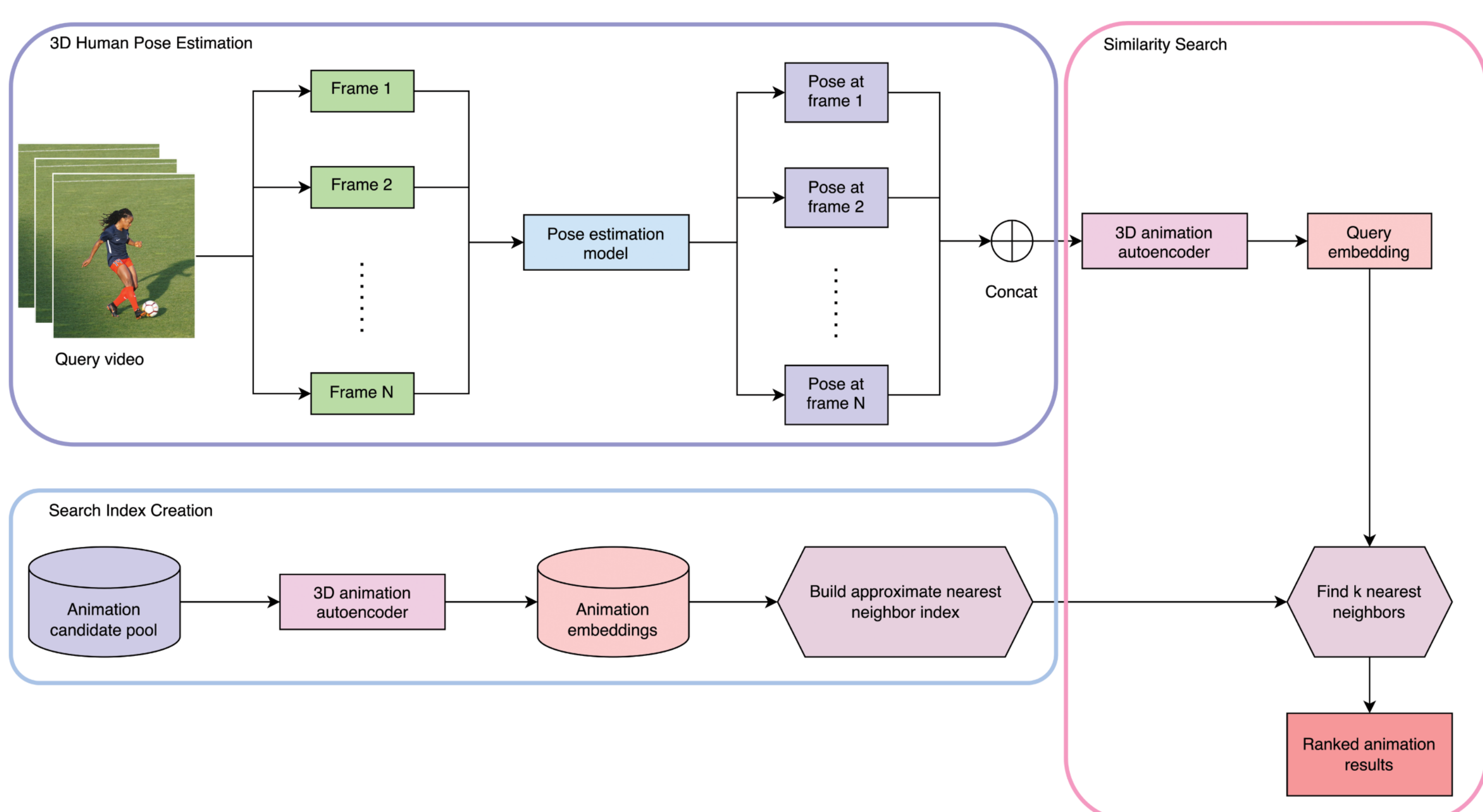# ARIA
APPLIED RESEARCH IN ACTION

Video Based Animation Retrieval

Finding similar animations using human motions in video sources

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PROJECT SUMMARY

Production teams at Ubisoft will generate motion capture animations for characters in their games. Teams that can re-use motion capture animations made available by past projects or other teams can reduce costs and improve development time. However, providing human-friendly ways to search this large multi-dimensional space is challenging.

The goal of this project is to make video sources available as a search input for the animation search space. Our approach leverages pose estimation models to extract query animations from video sources and encodes these animations as required by the search space. The encoded animations are used as search input, matched to their nearest neighbors and presented to the user in a satisfying experience.