The paper reports on the successful usage of a variant of the dynamic time warping algorithm for the detection of alankāra-s (micro-tonal ornamentations/embellishments) in Dhrupad. Dhrupad is the oldest surviving form of Hindustani Classical music, is monophonic in nature, and has a wealth of micro-tonal ornamentations. The artist’s main objective is to evoke the mood of the rāga (melodic-class) and this is achieved with the delicate explorations of flourishes and decorations. The artist digs into the nuances, note by note, in an unhurried and probing manner. These gentle nuances are difficult to identify. We have crowd-sourced multimedia annotations of three primary alankāra-s, namely, meenda (glides between notes), āndolana (vacillations in the note region) and gamaka (two notes alternation). These were used to substantiate the accuracy of detections. Two signals in the time domain, a query signal, which consists of fundamental ornament templates, and a reference signal were compared. Suitable parameters were extracted using the instantaneous robust algorithm for pitch tracking (IRAPT) and then these vectors were locally aligned. Using a variant of dynamic time warping, we then detect the matching subsequences in the reference signal. Several such subsequences, characteristic of the fundamental ornament templates, were identified by matching temporal subsequences. Some, which weren’t present in the crowdsourced annotations, were also identified and checked with experts. Finally, we provide a framework for choosing appropriate ornament templates for any given rāga. This approach helps us capture the embellishments in Dhrupad, which in recent times found a growing admiration for the sophistication of musical concepts underlying it and that it embodies the essence of Indian spiritual thought. Using this analysis, we plan to develop a pedagogical tool, a tool to enhance computer aided orchestration and also assist quantitative/qualitative computational music research.