CLAIMS

1. A method of decoding video data, the method comprising: determining a vector predictor for a current block of the video data; determining a first set of vector difference candidates based on a first pel-interval, the first pel-interval defining a first distance between consecutive vector difference candidates in the first set of vector difference candidates starting with the vector predictor; determining a second set of vector difference candidates based on the first set of vector difference candidates and a second pel-interval, the second pel-interval defining a second distance between consecutive vector difference candidates in the second set of vector difference candidates, and the second pel-interval being less than the first pel-interval comprising: including at least a subset of candidates of the first set of vector difference candidates in the second set of vector difference candidates; and adding candidates between the subset of candidates of the first set of vector difference candidates based on an integer multiple of the second distance; constructing a vector difference candidate list based on the second set of vector difference candidates; determining a vector for the current block based on the vector predictor and a vector difference from the vector difference candidate list; and reconstructing the current block based on the vector for the current block.

2. The method of claim 1, wherein determining the first set of vector difference candidates comprises: adding candidates to the first set of vector difference candidates that are each a set of positions surrounding a position of the vector predictor and an integer multiple of the first distance away from the vector predictor.

3. The method of claim 2, wherein adding candidates comprises adding candidates until a range threshold is satisfied.

4. The method of claim 2, wherein adding candidates comprises adding candidates until a cost value associated with a candidate of the first set of vector difference candidates satisfies a cost threshold.

5. The method of claim 1, wherein adding candidates between the subset of candidates comprises adding candidates to the second set of vector difference candidates until a cost value associated with a candidate of the second set of vector difference candidates satisfies a cost threshold.

6. The method of claim 1, further comprising: determining respective cost values associated with candidates of the first set of vector difference candidates; and constructing a first subset of vector difference candidates based on the respective cost values, wherein determining the second set of vector difference candidates comprises determining the second set of vector difference candidates based on the first subset of vector difference candidates.

7. The method of claim 1, further comprising: determining respective cost values associated with candidates of the second set of vector difference candidates, wherein constructing the vector difference candidate list comprises constructing the vector difference candidate list based on the respective cost values.

8. The method of claim 1, wherein the current block is encoded in intra block-copy (IBC) merge mode with block vector differences (IBC-MBVD), wherein the vector predictor is a block vector predictor (BVP), and wherein the vector difference candidate list is a block vector difference (BVD) candidate list.

9. The method of claim 1, wherein the second distance is less than or equal to the second pel-interval.

10. A device for decoding video data, the device comprising: one or more memories configured to store the video data; and processing circuitry coupled to the one or more memories, the processing circuitry being configured to: determine a vector predictor for a current block; determine a first set of vector difference candidates based on a first pel-interval, the first pel-interval defining a first distance between consecutive vector difference candidates in the first set of vector difference candidates starting with the vector predictor; determine a second set of vector difference candidates based on the first set of vector difference candidates and a second pel-interval, the second pel-interval defining a second distance between consecutive vector difference candidates in the second set of vector difference candidates, and the second pel-interval being less than the first pel-interval, wherein to determine the second set of vector difference candidates, the processing circuitry is configured to: include at least a subset of candidates of the first set of vector difference candidates in the second set of vector difference candidates; and add candidates between the subset of candidates of the first set of vector difference candidates based on an integer multiple of the second distance; construct a vector difference candidate list based on the second set of vector difference candidates; determine a vector for the current block based on the vector predictor and a vector difference from the vector difference candidate list; and reconstruct the current block based on the vector for the current block.

11. The device of claim 10, wherein to determine the first set of vector difference candidates, the processing circuitry is configured to: add candidates to the first set of vector difference candidates that are each a set of positions surrounding a position of the vector predictor and an integer multiple of the first distance away from the vector predictor.

12. The device of claim 11, wherein to add candidates, the processing circuitry is configured to add candidates until a range threshold is satisfied.

13. The device of claim 11, wherein to add candidates, the processing circuitry is configured to add candidates until a cost value associated with a candidate of the first set of vector difference candidates satisfies a cost threshold.

14. The device of claim 10, wherein to add candidates between the subset of candidates, the processing circuitry is configured to add candidates to the second set of vector difference candidates until a cost value associated with a candidate of the second set of vector difference candidates satisfies a cost threshold.

15. The device of claim 10, wherein the processing circuitry is configured to: determine respective cost values associated with candidates of the first set of vector difference candidates; and construct a first subset of vector difference candidates based on the respective cost values, wherein to determine the second set of vector difference candidates, the processing circuitry is configured to determine the second set of vector difference candidates based on the first subset of vector difference candidates.

16. The device of claim 10, wherein the processing circuitry is configured to: determine respective cost values associated with candidates of the second set of vector difference candidates, wherein to construct the vector difference candidate list, the processing circuitry is configured to construct the vector difference candidate list based on the respective cost values.

17. The device of claim 10, wherein the current block is encoded in intra block-copy (IBC) merge mode with block vector differences (IBC-MBVD), wherein the vector predictor is a block vector predictor (BVP), and wherein the vector difference candidate list is a block vector difference (BVD) candidate list.

18. The device of claim 10, wherein the second distance is less than or equal to the second pel-interval.

19. The device of claim 10, wherein the device comprises one or more of a camera, a computer, a mobile device, a broadcast receiver device, or a set-top box.

20. A device for encoding video data, the device comprising: one or more memories configured to store the video data; and processing circuitry coupled to the one or more memories, the processing circuitry being configured to: determine a vector predictor for a current block of the video data; determine a first set of vector difference candidates based on a first pel-interval, the first pel-interval defining a first distance between consecutive vector difference candidates in the first set of vector difference candidates starting with the vector predictor; determine a second set of vector difference candidates based on the first set of vector difference candidates and a second pel-interval, the second pel-interval defining a second distance between consecutive vector difference candidates in the second set of vector difference candidates, and the second pel-interval being less than the first pel-interval, wherein to determine the second set of vector difference candidates, the processing circuitry is configured to: include at least a subset of candidates of the first set of vector difference candidates in the second set of vector difference candidates; and add candidates between the subset of candidates of the first set of vector difference candidates based on an integer multiple of the second distance; construct a vector difference candidate list based on the second set of vector difference candidates; and signal an index into the vector difference candidate list for decoding the current block.