A code in a graph is called neighbour-transitive if it admits a group of automorphisms which stabilises the codewords set-wise, while acting transitively on the codewords and code-neighbours. The neighbour-transitive codes in Johnson graphs often correspond to interesting combinatorial and/or geometric objects. I will discuss the work of Liebler and Praeger towards a classification of neighbour-transitive codes in Johnson graphs and present recent progress relating to families of codes associated with quadratic forms on a binary symplectic space.