Efficient algorithms exist for finding optimal strategies in extensive-form games. However human scale problems, such as poker, are typically so large that computation of these strategies remain infeasible with current technology. State space abstraction techniques allow us to derive a smaller abstract game, in which an optimal strategy can be computed and then used in the real game. This thesis introduces state of the art abstraction techniques. Most of these techniques do not deal with public information. We present a new automatic public state space abstraction technique. We examine the quality of this technique in the domain of poker. Our experimental results show that the new technique brings significant performance improvement.