The goal of this thesis is to implement a software library that provides a wrapping of real-time socket-like communication into an cryptographic protocol with purpose similar to SSL or TLS, that is secure against an adversary in possession of a quantum computer. Resulting software utilizes the Supersingular Isogeny Diffie Hellman (SIDH) key-exchange algorithm for achieving this level of security, and is simple, portable and independent on system-specific primitives. The thesis gives a concise introduction to the theory on which SIDH is built, targeting the audience of undergraduate students of Computer Science.