COMP 754 — Cryptography & Security — Aj. Phillip Rogaway Problem Set #2 — Out: 10 July 02 — Due: 30 July 02 (in class)

Problem 1 Using the conventions used in AES, compute {05} • {a1}.

Problem 2 Implement the encryption-direction of AES directly from FIPS-197. You may use any programming language you like. Use your implementation to compute $AES_K(M)$ where $K=M=0^{128}$. Tell me the answer. Make *simplicity* the goal of your implementation, not speed. There are many implementations of AES on-line; do not consult any implementation that others have done.