

Computer Science

Contract #	Term	Course	Contract Title	Contract Description
273027	Spring 2015	CPSC-4505	Analysis of Intel AES Instruction Set	<p>In the low-level programming language Assembly, Intel has provided an optimized set of instructions for AES encryption that streamlines the process of encrypting information when using Intel processors. This honors contract seeks to explore taking this same instruction set and converting it to be optimized for ARM processors which are used in smart phones, tablets, and many project boards. This will allow for more efficient encryption on smaller, lower-powered devices.</p>
273025	Spring 2015	CPSC-3119	Digital Forensic Investigation on Solid State Drives	<p>Solid State Drives (SSD) are slowly replacing traditional computer hard drives and capturing the market. While SSDs are significantly more efficient than traditional hard drives in terms of data storage and retrieval and energy efficiency, SSDs pose huge challenge to digital forensics investigation. This project will involve reading and analyzing all research work accomplished so far on data retention and recovery in SSDs. The outcome of this project will be of two types: a presentation of the findings on Tower day and in ACM Mid-southeast conference 2015; and designing an experimental research project on SSD data retention and recovery. Once in every two weeks meeting with the mentor will be necessary for this project.</p>