

## **Technologies: M.S. Computer Sciences**

### **Programming 1, Grade: A**

Java, compiling, testing, debugging

### **Programming 2, Grade: A**

Java, Object Oriented Programming, polymorphism, abstraction, encapsulation, list, stack, queue, priority queue, binary search tree

### **Intro to Operating Systems, Grade: A**

C, operating system structure, process and thread synchronization and concurrency, file systems and storage servers, memory management, process scheduling, resource management, virtualization

### **Intro-Artificial Intelligence, Grade: A**

Java, supervised and unsupervised learning, linear regression, k-Nearest neighbors, Naive Bayes, neural networks, deep learning

### **Database Mgt Systems, Grade: AB**

SQL, relational database management systems, data model, relational model, indexing, query optimization

### **Introduction to Algorithms, Grade: A**

Algorithmic techniques and ideas, proofs, counterexamples, choosing the correct algorithm during the problem solving process

### **Intro-Program Languages & Compilers, Grade: A**

Java, studied and built a fully functioning compiler

### **(Graduate Level) Machine Learning, Grade: B**

Python, TensorFlow, nearest neighbor, decision tree learning, support vector machines, Bayesian networks, neural networks, unsupervised and reinforcement learning

### **(Graduate Level) Adv Comp Security & Privacy, Grade: A**

Explored various popular modern security risks and attack vectors

### **(Graduate Level) HPC for Apps in Engr, Grade: A**

C++, CUDA, MPI, OpenMP, CMake, gdb, cuda-gdb, Linux-controlled supercomputing, GPU and CPU based parallel computing, computer architecture concepts to maximize program speed and efficiency

### **(Graduate Level) Computer Vision, Grade: A**

MATLAB, image formation, feature detection, motion estimation, image mosaics, 3D shape reconstruction, object recognition