RESET

Georgia Tech
College of Computing

Degree Worksheet
MSCS
Area of Specialization: Machine Learning

Machine Learning Specialization = 15 hours of core + required electives
15 hours of "free" electives
30 Hours Total for Degree

Must earn grades of "B" or higher in all courses that count in the Area of Specialization. Must earn a minimum 3.0 overall GPA to graduate. Only letter grade coursework will count.

SECTION 1 - Demographics

Name: _____ **GT ID#** (example: *90XXXXXXX*)**:** _____

Graduation Semester (example: *Spring 2024*)**:** _____ **Date:** _____

SECTION 2 – Machine Learning Core (6 hours)

Take one (1) course from:
Algorithms

Mark (X)	Prefix & No.	Course Title	Semester Taken	Credit Hours	Grade
	CS 6505	Computability, Algorithms, and Complexity			
	CS 6515	Introduction to Graduate Algorithms *(formerly CS 8803 GA Graduate Algorithms)*			
	CS 6520	Computational Complexity Theory			
	CS 6550	Design and Analysis of Algorithms			
	CS 7510	Graph Algorithms			
	CS 7520	Approximation Algorithms			
	CS 7530	Randomized Algorithms			
	CSE 6140	Computational Science and Engineering Algorithms			

And, one (1) course from:

Mark (X)	Prefix & No.	Course Title	Semester Taken	Credit Hours	Grade
	CS 7641	Machine Learning			
	CSE 6740	Computational Data Analysis: Learning, Mining, and Computation			

Section 2 - Transfer Credit / Substitutions (if applicable)

Prefix & No.	Course Title	Semester Taken	Credit Hours	Grade

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SECTION 3 – Machine Learning Required Electives (9 hours)

Pick three (3) of:

Mark (X)	Prefix & No.	Course Title	Semester Taken	Credit Hours	Grade
	CS 6220	Big Data Systems & Analysis			
	CS 6222	Machine Learning Systems			
	CS 6471	Computational Social Science			
	CS 6476	Computer Vision			
	CS 6601	Artificial Intelligence			
	CS 6603	AI, Ethics, and Society *(formerly CS 8803-O10)*			
	CS 6604	Conversational Artificial Intelligence			
	CS 7280	Network Science			
	CS 7476	Advanced Computer Vision			
	CS 7535	Markov Chain Monte Carlo			
	CS 7540	Spectral Algorithms			
	CS 7545	Machine Learning Theory			
	CS 7616	Pattern Recognition			
	CS 7626	Behavioral Imaging			
	CS 7632	Game AI			
	CS 7634	AI Storytelling in Virtual Worlds			
	CS 7637	Knowledge-Based AI			
	CS 7642	Reinforcement Learning and Decision Making *(formerly CS 8803-O03)*			
	CS 7643	Deep Learning			
	CS 7644	Machine Learning for Robotics			
	CS 7646	Machine Learning for Trading			
	CS 7647	Machine Learning with Limited Supervision			
	CS 7648	Interactive Robot Learning			
	CS 7649	Robot Intelligence: Planning			
	CS 7650	Natural Language			
	CS 7651	Human and Machine Learning			
	CS 7652	Large Language Models			
	CS 8803	Special Topics: Probabilistic Graph Models			
	CSE 6240	Web Search and Text Mining			
	CSE 6242	Data and Visual Analytics			
	CSE 6243	Advanced Topics in Machine Learning			
	CSE 6250	Big Data for Health *(formerly CSE 8803)*			
	CSE 7752	Scientific Machine Learning			
	CSE 7850	Machine Learning in Computational Biology			
	ISYE 6416	Computational Statistics			
	ISYE 6420	Bayesian Statistics			
	ISYE 6664	Stochastic Optimization			

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Section 3 - Transfer Credit / Substitutions (if applicable)

Prefix & No.	Course Title	Semester Taken	Credit Hours	Grade

SECTION 4 – "Free" Electives (15 hours) *"Free" Electives are any remaining letter grade courses not used above and within program rules.*

Prefix & No.	Course Title	Semester Taken	Credit Hours	Grade

Section 4 - Transfer Credit / Substitutions (if applicable)

Prefix & No.	Course Title	Semester Taken	Credit Hours	Grade

This section to be completed by MSCS Advisor

Notes: **S-GPA:** _____ **C-GPA:** _____

Advisor Sign _____ Date _____