Computer Science Graduate Program/Independent Study Agreement

Student ID	109508857	Student Name	Fei Hu	
CU Email Address	fei.hu@colorado.edu	Major Compu	ter Scienc	e
Degree Pursuing	PhD	Cumulative	GPA	4.00
Previous # of Independent Study hours earned	0	Semester (Fall/Sp Summer) Year	oring/	Fall 2020
Faculty member	Shivakant Mishra	Credit Hour	s (1-6)	3
Describe goals/work of the proposed IS	The goal of this independent study is to explore serverless computing at the edge to execute popular machine learning alogorthms. Different serverless computing solutions proposed for cloud and edge will be evaluated qualitatively and quantitatively.			
Time line for completion of the work (indicate any specific assignments, dates when specific elements are to be finished	1) Aug.24 Sept.30: Finish the evaluation of base machine learning application on Raspberry Pi (sliced algorithm is used if resource is not enough); 2) Oct.01 — Nov.15: Finisth the evaluation of machine learning application through GreenGrass and open-sorced serverless platform OpenWhisk or OpenFaaS; 3) Nov.16 Dec.05: Finish the report.			
List of reference materials to complete the work	[1] Machine Learning Algorithms; [2] https://openwhisk.apache.org; [3] https://docs.openfaas.com; [4] https://docs.aws.amazon.com.			
Method of conducting the work (for example, research &reading, written report)	research & reading, experiment	ation, written report.		
Method of evaluation (final paper, report, publication)	A report to show experiment results of machine learning applications under three scenarios: edge machine learning, commercial serverless platforms and open-sourced serverless platforms.			
AGREEMENT: By signing this, I agree to abide by the requirements stated above. Also, I verify that this independent study does not overlap significantly with a work-study, internship or any other paid work that I am undertaking, if any.				
Student Signature	Fei Hu		Date	08/05/2020
Faculty Signature	*Mhoo		Date	08/11/2020

Date

Grad Advisor

the hours

signature after adding

Independent Study Policy and Guidelines

Introduction

Independent Study is an opportunity for students to earn academic credit for learning outside the formal class structure, under the individual direction of a faculty member. IS is provided to students as an opportunity to conduct research outside of MS thesis or PhD dissertation requirements.

Policies/Eligibility

- 1. Graduate School allows a maximum of 7 independent study degree credits towards MS and no restriction on this number for PhD students, as long as, they meet other departmental requirements.
- 2. Students must have a GPA of 3.3 and above to qualify for independent study hours.
- 3. The student is required to complete and sign an Independent Study Agreement. This must be approved and signed by the faculty directing it and by the departmental independent study coordinator.
- 4. University policy states that only faculty members with appropriate graduate faculty appointment with the Graduate School may sponsor graduate Independent Study.
- 5. Graduate level independent study may not be used as an avenue for allowing students to take undergraduate courses in the major department. The department may require a student to take undergraduate major courses as a means of making up deficiencies, but the student should be informed that credits generated in these courses may not be counted in the minimum number required for the degree, but are included in the cumulative GPA.
- 6. Independent Study is to be enrolled for in the same time frame as all other courses.
- 7. Independent Study credit will be graded upon satisfactory completion of the project requirements as defined in the Independent Study Agreement.

Restrictions

University rules do not normally allow Independent Study credit for internship experiences, work-study or hourly pay work done in departments, or for work also compensated by a salary.

How to Enroll

The Independent Study may not be done retroactively. That is, the agreement for Independent Study is to be completed, signed, and approved by all parties prior to the initiation of the project, and no later than one week prior to the end of the registration period.

Fill out this form, sign, get your faculty's signature and hand this over to the Graduate Advisor to get enrolled.

Last Updated - 08/22/2017