# **PhD Student Annual Review Progress Report**

August 2020

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## Progress on coursework and other official milestones.

I started my PhD in Fall 2019 and my advisor is Prof. Nima Kalantari.

### GPA (as of xxx):

Course Number	Course Title	Semester	Grade
CSCE 441, 500	COMPUTER GRAPHICS	Fall 2019	A
CSCE 629, 602	ANALYSIS OF ALGORITHMS	Fall 2019	A
CSCE 691, 665	RESEARCH	Fall 2019	S
CSCE 606, 600	SOFTWARE ENGINEERING	Spring 2020	A
CSCE 689, 600	SPTP: COMP PHOTOGRAPHY	Spring 2020	A
CSCE 691, 665	RESEARCH	Spring 2020	S

Suppo	<i>,</i> 10
How ar	re you currently supporting yourself while working on your PhD?
	Teaching Assistantship in (Department)
X	_Research Assistantship with (Faculty member)Prof. Nima Kalantari
	Other job for the University
	Job Outside the University
	Other

Please describe the status of all other required milestones in the PhD program, including whether you've completed them or when you plan to complete them. Please provide specific dates, at least for the next immediate milestone.

Degree plan<sub>2</sub>

Fall 2020. Filing the degree plan is one of the goals of the next year.

Qualifier<sub>3</sub>

Spring 2020 Pass

Preliminary exam<sub>4</sub>

- Proposal<sub>4</sub>
- Final examination<sub>5</sub>
- Dissertation<sub>5</sub>
- Improvement plane
- ELPE<sub>7</sub>
  Spring 2021. Goal for the next year

### Research.

I am interested in deep learning and computational photography. Currently, I am working on topics in video denoising, which is my first research project.

- Research problem 1. Video denoising is not just aiming to generate clear images from its corresponding noisy images. It also has to keep the temporal consistency of denoised images. Under the supervision of Prof. Nima Kalantari, Avinash Paliwal and myself work on this project using deep learning methods. We have made some progress, and will submit a paper to some conference.

### Publications.

None.

### **Professional activities.**

None

### Goals for the next year.

- Goal 1 (degree requirements): I intend to take the ELPE exam Fall 2020. To complete this goal, I will take related practices beforehand.
- Goal 2 (research). I intend to continue research on computational photography and deep learning; After finishing the current video denoising project and submitting a paper about it, I will do another related project in this area.
- Goal 3 (publications): I intend to submit the paper about video denoising to WACV, which is due on August 26th, or to CVPR, which is due on Nov 16. To complete this goal, I need to do the following: getting a video denoising result better than state of the art, writing the paper, submitting the paper. This work is important for my research because it will be related to my dissertation and it's also my first PhD project, I'm hoping to get positive feedback from it.

I also intend to get another paper published in some top conference. To complete this goal, I need to do the following: finding a new project, getting familiar with the new sub-area, coming up with new ideas and designing experiments to verify the ideas, generating superior results, and submitting a paper to some top conference, like CVPR, Siggraph, Siggraph Asia, and ICCV.

- Goal 4 (professional activities). I intend to attend Siggraph 2021

1 Students who started a year ago or earlier should be actively working with a faculty member; otherwise, they will need an excellent explanation for why this is not the case or they will receive an Unsatisfactory. New students (those who started in F'11 or S'12) are also expected to be involved in research. If you do not have a formal advisor yet, make sure your informal advisor writes a review for you. If you are changing advisors, please discuss this in the report. The faculty expects you to find another advisor quickly. Be sure to get the new advisor to write a review, even if you have not yet filed a change of committee.

<sup>2</sup> Students who started a year ago or earlier should have a DP on file, or they will have a registration hold put on them. If you submitted your DP this semester, please note this in your report in case your DP is still being processed.

3 If you received a Conditional Pass on your qualifier exam, you will receive a Needs Improvement on your PhD review until all those conditions are met. If you failed the qual, describe how you are preparing to pass it the second time, and when you plan to take it. If you have not taken the qual, discuss when you plan to take it and how you are preparing.

<sup>4</sup>Once PhD students have filed DPs, completed coursework, and passed the qual, the #1 reason for a Needs Improvement is the preliminary exam/proposal. You should take your prelim in the semester following completion of your coursework. If you are behind schedule, discuss how you will complete your prelim and proposal, and then keep that promise. Make sure you get buy-in from your advisor. And have specific plans; vague statements such as "in this coming year" are useless.

 $_5$  If you have been here for a long time (see PhD timeline), you should talk about your timeline to graduation. The faculty wants to see that you are busy writing your dissertation and ideally have set your PhD final exam date. This is critical if your courses are in danger of expiring (after 10 years) or if you have been in G8 status more than 21 semesters (exceeding the in-state tuition cap). If your prelim has expired (after 4 years), you must explain what you will do about that (hold it again, petition OGS for an extension due to special circumstances). If you said at the last PhD Review that you would graduate within a year, and you are still here, your report should have an excellent explanation as to why you didn't graduate.

6 Students who received Needs Improvement or Unsatisfactory on last year's PhD review should also discuss their agreed Improvement Plan goals and whether or not they met them. Students who do not meet their IP goals are likely to receive Unsatisfactory. If there were extenuating circumstances that prevented you from completing these tasks, talk about them in your report, what you are doing to complete them, and make sure your advisor writes at length about this in their report. If you received an Unsatisfactory last year, you must show significant improvement this year or you will almost certainly receive a second Unsatisfactory and be dismissed. 7 International students. Please note whether or not you have passed the ELPE. If you have not, please report the dates and scores you have received on your attempts, and your plans for retaking it. You should pass this as soon as possible, even if you believe you have no plans to TA.