# INDIVIDUAL STUDY PLAN FOR POSTGRADUATE EDUCATION

At the Faculty of Science and Technology, Uppsala University
Use the blue fields for admission. Use both the blue and the black fields for yearly revision. Note that all pages must be signed.

Subject and specialisation	on.1 Computer Science		Admission <sup>2</sup>
			Revision year:
			20190222
Postgraduate student <sup>3</sup>			
Name: Huu-Phuc Vo		Personal registration numb	er: 19850126-1351
	e and graduate education (title, e ience, Ho Chi Minh City, Vietnam.	xtent, place of education, date	e): 5 years full-time bachelor in CS,
2 years of PhD programme,	The Graduate University for Advance	ed Studies, 2012-2014, Tokyo, J	apan.
study plan, as well as what is ap guidelines for my postgraduate	oplicable according to the study plan for education specified in this individual st	r the specified postgraduate subject output the specified postgraduate subject to the plan and am aware that the plan	The state of the s
Revisions: The reported perf supervisor and the co-supervisor	formance and the plans indicated for the or/s.	remainder of the programme length	are set out in agreement with the main
Date:		Signature:	
Supervisor <sup>4</sup>			
At least two supervisors must be Technology, including the gene area/specialisation. We underta	e appointed. I have read and understood ral study plan, as well as what is applicate to provide supervision for the comp an for the subject/specialisation, and thi	able according to the study plan for the letion of the programme in accordance	he specified postgraduate subject
Date:	Main supervisor:	Signature:	
20190222	Di Yuan	00 00	
Date:	Co-supervisor:	Signature:	
20190222 Date:	Justin Pearson Co-supervisor:	ignature:	
Date.	Co-super visor.	Signature.	
Date:	Co- supervisor:	Signature:	
Supervision changes <sup>5</sup>	The "Change of supervisor" form is ava	uilable for supervisor changes/replace	ments.
Significant changes from	previous plan <sup>6</sup>		
education and/or the date of publi	een significant changes regarding princi ic defence. Specify on the last page. If si y plan must be approved by the head of	gnificant changes to the previously pr	ffect the arrangement of the postgraduate repared plan have been made, i.e. the box
Professor responsible for	r postgraduate studies /Ass	istant professor responsible	for nostgraduate studies 7
	tgraduate education in the specified pos		
Date: 20190222	Name: Bengt Jonsson	Signature:	
		Dest -	
Head of department <sup>8</sup> De	epartment: Information Technology	0	
financial support can be expected conducted. The department provequipment and access to supervise		ne Higher Education Ordinance, prov programme as concerns working con	ided that the studies are properly nditions, research environment,
Significant changes: The u	indersigned head of department approve	es the revised study plan with the abo	ove assessment and undertakings.
Date: 20190222	Name: Lina von Sydow	Signature:	m Sydm
Planned date of study pla	an revision, licentiate degree a	nd public defence of doctors	al thesis
Is a licentiate degree plann	ned as an intermediate goal?	If yes, specify planned date:	
Yes	No	20200918 (this date will be	revised to include any periods
Planned date of defence of		of extensive sick leave or p	
r failled date of defence of	f doctoral thesis 10: N/A	Latest date for revision of th	nis pian'': 20190522

Preliminary title of thesis 12: Machine-Assisted Support for	MiniZinc Reformulation	
Financing plan for entire programme period <sup>13</sup>		
Type of employment/financial support:  Doctoral student employment at UU  Doctoral student employed by company  Doctoral student at another higher education institution  Scholarship  SIDA-financed doctoral student "residence grant"  Other  If other than doctoral student employment at Uppsala Universit Note that doctoral students who are financed by scholarships m scholarship amount is not equivalent to the net amount of a doctoral student of the net amount of the net amount of a do	ust receive supplementary fun	
Other planning <sup>14</sup> Planned extent and nature of teaching and department wo There is no plan for any teaching activities while Phuc is doing the Planned leaves of absence or similar over the upcoming y TBA	e necessary research towards	year (updated at revision): a licentiate degree.

# Report actual distribution of time (at revision)15

Study time refers to net time for postgraduate education (research and postgraduate courses), i.e. teaching, parental leave, sick leave, etc. should *not* be counted, but instead reported as Other.

### Date of admission:

Total actual period of study (months): 30.2 as of 20190222

50% of the requirements for the Degree of Doctor met

/ expected to be met on: 20180918

80% of the requirements for the Degree of Doctor met

/ expected to be met on: N/A

Normally, 50% should be met after 24 months of actual period of study, and 80% after 38 months of actual period of study. If the doctoral student is not assessed to have reached 50% or 80% of the requirements by these dates, the department will investigate the reasons for this and take appropriate action. Maximum actual period of study: 48 months.

Period (start date-end date)	Period of study (months or %)	Teaching, including administrative duties (months or %)	Other, please specify	Other, extent (months or %)
2015-11-10 - 2016-11-09	80%	20%	0	0
2016-11-10 - 2017-10-31	80%	20%	0	0
2017-11-01 - 2017-12-31	80%	20%	0	0
2018-01-01 - 2018-01-31	1 month	0%	0	0
2018-02-01 - 2018-07-21	3 months	0%	0	0
2018-07-22 - 2018-11-20	2,4 months	0%	0	0
2018-11-21 - 2019-02-22	3 months	0%	0	0

# Individual research plan<sup>16</sup>

A summarised preliminary plan for research, with a general overview of the entire postgraduate education and a more detailed description of the upcoming year (if relevant, as a separate attachment). Also specify planned temporary visit at other academic or non-academic institutions (location, date and length of temporary visit).

The plan should be updated during revision; use the field below.

# Goals stated for the past three effective months:

Detailed research goals and deliverables will be maintained in a joint document: https://docs.google.com/spreadsheets/d/14BBxPgO0u7Yb0fYl3kbWCCFem-0WKwXaAymNTByRfGg/edit?usp=sharing This will be reviewed every full time 3 months jointly with the supervisors and the student. This document from November 21 2018 (which is unchanged since October 5 2018) is attached to this ISP as an appendix.

The goals for the 3 full-time months from 2018-10-05 are:

In order to prepare the groundwork for machine-assisted model refactoring, Phuc will do an in-depth study of the literature on model reformulation in constraint programming, and will build a repository of MiniZinc model pairs showcasing examples of all the identified reformulations. The initial literature will be suggested by his supervisors, and will for example discuss papers from previous instances of the International Workshop on Constraint Modelling and Reformulation:

https://www-users.cs.york.ac.uk/~frisch/ModRef/. He will produce that repository and an in-depth survey of about 20 pages on the literature that will be potentially included in his licentiate thesis. If a satisfactory survey and repository are delivered in less than those 3 months, then research goals and deliverables of the joint document (link above) will be shifted forwards in time.

The long-term research goals that Phuc will work on include:

- surveying MiniZinc and other languages
- learning about tactics and proofs in theorem proving
- learning about machine-assisted refactoring of programming languages in order to apply such techniques to MiniZInc models.

#### Goals for the coming three months:

In order to Phuc to achieve the long term research goal of providing the groundwork for machine-assisted model refactoring, Phuc will study formal logic and an introduction to proof assistances. Further, so that Phuc does not lose momentum from his work on the survey on reformulation he will continue to maintain and contribute to his repository of reformulations that was started in the previous ISP. Thus the next 3 months research goals will be split into two goals that will be done in parallel

Goal 1 -- Phuc will study the first four chapters of Applied Logic for Computer Scientists: Computational Deduction and Formal Proofs av Ayala-Rincón, Mauncio; de Moura, Flávio L. C, which is available online at the University of library. https://link.springer.com/book/10.1007%2F978-3-319-51653-0

It is estimated that the first two chapters are revision of bachelor level material while chapters three and four contain more advance material and exercises with a proof assistant (PVS). It is unreasonable to give study points for the first two chapters, but since chapters three and four contain more advance material 7.5 points will be awarded upon successful study of the all the material in the book. In order to assess that Phuc has mastered the material he will do the exercises in each chapter under the supervision of Justin Pearson (who has had considerable experience teaching courses in formal logic before). Justin will decide for each chapter which subset of the exercises of Phuc will have to complete. It is intended that the majority of the exercises in the first four chapters will be completed. Phuc will be expected to produce the answers to each exercises using LaTeX in order to practice his LaTeX skills. Upon completion of all the selected exercises a recommendation will be made to the main supervisor to award the study points.

It is estimated that Goal 1 will take at most 10 weeks of full time study.

Goal 2 - Continued development of the online repository of model reformulations. Phuc will continue to read papers on reformulation and put new examples in the repository. Further it is expected that for one example before and after model pair that Phuc produces a formal proof using PVS that the reformulation is correct.

Moreover, the following are to be accomplished with respect to the plan of the previous ISP:

- To complete/finalize the literature survey with content/examples illutrating reformulation techniques, and improve the presdentation to meet the scientific writing (including thesis) standard. As of finalizeing this ISP, Phuc is awaiting comments and feedback from the supervisor of an updated survey draft.
- If another re-examination is granted, complete the two credits of 1DL451 project. As a remark, Phuc has requested to drop this goal.

Year1:			
Year2:			
Year3:			
Year4:			

# Courses, planned and completed, connected to knowledge and skills goals, and requirements for the specialisation<sup>17</sup>

General plan for entire education and detailed plan for the upcoming year

Compulsory courses: Course Research ethics (min 2 credits), mandatory for both licentiate and PhD Basic pedagogical course (7.5 credits at UU) (for those who will teach	Semester	Credits	Passed (date in Ladok)
	VT16	2	20161215HT15
courses at the undergraduate and graduate levels)			

### Other courses:

Other courses:			
Course	Semester	Credits	Passed (date in Ladok)
Statistical Machine Learning	HT15	3	2016-06-11
Research Introduction for New PhD Students	2017	3	2017-10-17
Low-level Parallel programming	VT16-VT1	5	2017-08-08
	7		
UPMARC Summer School 2016	VT16	1	2016-06-10
Scientific Writing	HT16	2	2016-11-23
Oregon Programming Language Summer School 2017	VT17	6	2017-07-08
Semantics for Applications	HT16	5	2016-10-17
Computing Education Research	HT16-VT1	10	2017-01-15
	7		
UPMARC Summer School 2017	VT17	1	2016-06-16
UPMARC Summer School 2018	VT18	1	2018-08-10
Basic Modelling for Discrete Optimisation - online course	VT18	3	2018-11-30
Advanced Modelling for Discrete Optimisation - online course	VT18	2	2018-11-30
Combinatorial Optimisation and Constraint Programming:	HT18	2	
Modelling Project			

Total: 44 credits

Progression Postgraduate education aims to develop the knowledge and skills			
research (HL). The Qualifications Ordinance (HF Annex 2) stipulates the require	ments that n	nust be met t	o obtain the
Degree of Doctor. Mark and describe in what way the qualitative targets have be	en complete	ed. See appe	ndix for
examination goals for the licentiate degree.		11.10	G 1 1
Examination goals	Begun	Halfway	Completed
A. Knowledge and understanding			
A1. Demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field			
A2. Demonstrate familiarity with research methodology in general and the methods of			
the specific field of research in particular.			
B. Competence and skills			
<b>B1.</b> Demonstrate the capacity for scholarly analysis and synthesis as well as to review and assess new and complex phenomena, issues and situations autonomously and critically			
<b>B2.</b> Demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work.			
<b>B3.</b> Demonstrate through a dissertation the ability to make a significant contribution to the formation of knowledge through his or her own research.			
<b>B4.</b> Demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general.			
<b>B5.</b> Demonstrate the ability to identify the need for further knowledge.			
<b>B6.</b> Demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity.			
C. Judgement and approach			
C1. Demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics.			
C2. Demonstrate specialised insight into the possibilities and limitations of science, its role in society and the responsibility of the individual for how it is used.			
Evaluation and planning in comparison to examination goals Justify the above has gone well and less well over the past year (experiments, writing, keeping to s duties, etc). Make note of what measures are needed to resolve any issues (and w what is planned to meet the progression towards the above qualitative targets (the and the undertakings of the supervisor/department). At admission, plan for first y Year1:	chedule, tea ho performs undertaking	ching, depart the measure	tmental es). Specify
Year2:			
Year3:			
Year4:			
Completed (reported) research work (if relevant, as separate attachment) <sup>19</sup> Essays, conferences, seminars, etc. Specify the status of the essays (manuscript, s - Published: Vo, HP., Berglund, A. & Daniels, M. (2017). A perspective from Vietnamese Proc. 5th International Conference on Learning and Teaching in Computing and Engineering Learning and Teaching in Computing and Engineering (LaTiCE 2017), pp. 23-24. IEEE Coninclude this paper in the licentiate thesis.)	students on to g, the 5th Inte nputer Societ	eaching of sof ernational Cor	t skills. In: ference on
<ul> <li>Attended NordConsNet 2018 workshop on constraint programming in Göteborg on 29th M</li> </ul>			
<ul> <li>- Published: Fernandez-Reyes, K., Clarke, D., Castegren, E. &amp; Vo, HP. (2018). Forward to COORDINATION 2018, the 20th International Conference on Coordination Models and Lan include this paper in the licentiate thesis.)</li> </ul>			

Postgraduate educational environment Supervision, infrastructure, other<sup>20</sup>. Planned extent, organisation and content of supervision. Phuc has a main supervisor (Di Yuan) and a co-supervisoe (Justin Pearson). Justin is responsible for supervision for research. The general arrangement of supervisor consists of weekly progress meeting (~30 minutes) and on-demand scientific meetings, as well as commiunications via email. Access to requisite infrastructure/equipment/tools. N/A Other. Evaluation. Vear1. 1DL451: Phuc did not pass the project part in 2018, nor the re-examination in Jan/Feb 2019. Survey: Phuc has delivered a draft of the survey along with a couple of updates in Jan-Feb 2019. The supervisors have provided comments and feedback related to 1) explaining better the key ideas of the reformulation techniques with illustrative examples, and 2) improving the presentation and writing (including careful revision for correcting language errors). Repository: Phuc sent a link to repository (https://github.com/PhucVH888/reformulation-caseStudies) on Jan. 21 2019. The link is also provided in the draft survey. Additional information is provided in Section 21. Year2: Year3: Year4: Supervisor's reflections: Di: I recognize the progress towards the goals stated in the previous ISP. That successful completion of the project in 1DL451 has however resulted in a delay in terms of the acquisition of skill necessary for research. The survey is taking shape, though significant amount of effort is needed for improving the presentation and language (including correction of grammar errors) before detailed proofreading by the supervisors. These aspects have been communicated in the progress meetings. I was not aware Phuc submitted a paper to CCGRID 2019. Phuc notified after paper acceptance. The work/paper is not part of the ISP. I was not aware Phuc applies to be a student volunteer at ETAPS. This conference is not in area of of research of Phuc. It has been commnicated to Phuc that paper submissions as well as matters related to business travels must be discussed with the supervisors in advance (i.e., before Phuc submits a paper or applies for attending a venue to the organisers). PhD student's reflections: Please see the attached separate sheet. The text cannot be accommodated here due to space limit. Comments (on the organisation, extent, contents, quality of the supervision, e.g. what can be improved, etc.): At the moment, the social and organisational work environment is very poor for me, and this is affecting me negatively in several ways. To improve the poor work environment, I propose to change to another division. I strongly believe that changing to another division is going to improve the poor work environment. The previous ISP (2018-10-05) was approved without the consensus of Phuc and was valid from 2018-10-05 before approving on 2018-11-21. Phuc did not get any scientific advice from his supervisors, Justin and Pierre, in 1.5 months from 2018-10-05 to 2018-11-21. In the previous ISP (2018-10-05), the goals are "He will produce that repository and an in-depth survey of about 20 pages on the literature that will be potentially included in his licentiate thesis". These goals are NOT specific, measurable, attainable, realistic and time-bound (SMART). These goals are unrealistic since they must be achieved within 2 months from approved date 2018-11-21. Phuc gets feedback and comments from the supervisor for the 30 pages draft after 7 days while Phuc has very limited time to

month from the time he submitted. See next page.

produce the repository and write a survey. The feedback and comments on the repository from his supervisor are delivered after 1

# Additional remarks<sup>21</sup>

Significant changes from the previous study plan that require the review of the head of department should be reported

Pierre Flener is no longer appointed as the 3<sup>rd</sup> supervisor since 20181210

Phuc did not pass the 1DL451 project examination as planned in the previous ISP. A re-examination has been offered by Pierre Flener Jan. 2019. Phuc submitted new report on Feb. 1, 2019. By Feb 18, it is concluded that the report does not pass the requirements.

The goal of finishing the survey from the previous ISP remains to be reached. A new version was submitted 2019-02-19. Many of the comments previous have been taken on board. Neither supervisor has had time to read the report thoroughly nor assess if it meets the research goals of the previous ISP. The supervisors will give a judgment as soon as possible. Phuc provided a new version of the repository on 2019-02-19. The new version of the repository is much improved over the previous version, but neither supervisor has had time to assess if it satisfies the research goals from the previous ISP. A judgement will be given as soon as possible.

Remark from Phuc: Phuc has sent in a request for prolongation of his study time in connection with the preparation of the previous ISP. This request will be handled later.

The planned date of 20200918 is based on the current estimation. This may need to be updated in the next ISP. In addition, the time distribution in Section 15 is also subject to verification.

# APPENDIX - LICENTIATE EXAMINATION

Progression<sup>22</sup> Postgraduate education aims to develop the knowledge and skills needed to independently conduct research (HL). The Qualifications Ordinance (HF Annex 2) stipulates the requirements that must be met to obtain the Licentiate degree. Mark and describe in what way the qualitative targets have been completed. Examination goals for Licentiate degree Begun Halfway Completed A. Knowledge and understanding A1. Demonstrate knowledge and understanding in the field of research including current specialist knowledge in a limited area of this field as well as specialised X knowledge of research methodology in general and the methods of the specific field of research in particular. B. Competence and skills B1. Demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake a limited piece of research and other qualified tasks within predetermined time frames in order to contribute to the formation of knowledge as well as to evaluate this work. B2. Demonstrate the ability in both national and international contexts to present and discuss research and research findings in speech and writing and in dialogue with the academic community and society in general. B3. Demonstrate the skills required to participate autonomously in research and X development work and to work autonomously in some other qualified capacity. C. Judgement and approach C1. Demonstrate the ability to make assessments of ethical aspects of his or her own research. C2. Demonstrate insight into the possibilities and limitations of science, its role in society and the responsibility of the individual for how it is used. C3. Demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning. Evaluation and planning in comparison to examination goals Justify the above assessment. Briefly describe what has gone well and less well over the past year (experiments, writing, keeping to schedule, teaching, departmental duties, etc). Make note of what measures are needed to resolve any issues (and who performs the measures). Specify what is planned to meet the progression towards the above qualitative targets (the undertakings of the doctoral student and the undertakings of the supervisor/department). At admission, plan for first year. Year1: A1: Phuc is in early stage with respect to the current research field. B1: Phuc is wirting a survey and working on the ability to identify and formulate issues with scholarly precision critically, autonomously B2: Phuc participated in several meetings about UpScale project, which was in collaboration between different universities such as Oslo University (Norway), Imperial College (England), Centrum Wiskunde & Informatica (Netherlands), and Uppsala University (Sweden). He presented his work and discussed with researchers and Ph.D. colleagues from other universities. Phuc was a local student aid for ETAPS conference in 2017, and participated in many presentations in the ETAPS conference. B3: Phuc has given ideas for the research goals in the coming three months C1: Phuc has taken PhD course in research ethics. Year2: Year3:

# **EXPLANATIONS**

<sup>&</sup>lt;sup>1</sup> Specify research subject and specialization

<sup>&</sup>lt;sup>2</sup> Check box for admission or revision. If revision specify which year.

<sup>&</sup>lt;sup>3</sup> Personal details. Specify eligible education.

<sup>&</sup>lt;sup>4</sup> Main- and co-supervisors

<sup>&</sup>lt;sup>5</sup> Check box if changes are made among the supervisors

<sup>&</sup>lt;sup>6</sup> Check if significant changes have been made from previous plan

<sup>&</sup>lt;sup>7</sup> Professor responsible for research education (FUAP) or assistant FUAP should approve the plan

<sup>8</sup> Head of department have to approve the plan

<sup>&</sup>lt;sup>9</sup> Planned date of revision and if licentiate degree is planned

<sup>10</sup> Planned defence date

<sup>11</sup> Date for next revision of plan

<sup>12</sup> Preliminary title of thesis

<sup>13</sup> Financing plan

<sup>&</sup>lt;sup>14</sup> Planned department work, e.g. teaching

<sup>15</sup> Report actual distribution of time, i.e. how much time was spent on research studies

<sup>16</sup> Specify individual research plan, in detail for the next coming year

<sup>&</sup>lt;sup>17</sup> Planned and passed courses

<sup>&</sup>lt;sup>18</sup> What has been done, what is planned in order to reach the examination goals. At admission, plan for first year.

<sup>&</sup>lt;sup>19</sup> List completed research work, i.e. papers, conferences etc.

<sup>&</sup>lt;sup>20</sup> Planned organization and extent of supervision. What has been good, what can be improved?

<sup>&</sup>lt;sup>21</sup> Specify significant changes

<sup>&</sup>lt;sup>22</sup> What has been done, what is planned in order to reach the examination goals. At admission, plan for first year.

#20: PhD student's reflections:

Phuc disagrees with the previous ISP, which was approved without his agreement. "Related to the research goals, the workload of the above research goals at section 29 are too high. The duration to accomplish those goals are unreasonable. Phuc proposes to remove the goals that saying "Phuc will build a repository ...". In other word, Phuc won't build a repository of MiniZinc model pairs showcasing examples of all the identified reformulation. Phuc disagrees with having the words (There is no plan to include this paper in the licentiate thesis.) in section 32 and requests for removing them. Phuc requests to have a self contained ISP, so the link to the other document in section 29 must be removed. Related to the project course (1DLA51 or UU-11004), this is the course at second level according to <a href="https://www.antagning.se/se/search?">https://www.antagning.se/se/search?</a> publisher=uu&freeText=UU-

11004&period=HT 2018&lang=sv. However, Pierre and Justin give malicious comments that it's not the second level project course. Phuc requests to correct that the project course (1DL451 or UU-11004) is a second level project course, but both Pierre and Justin refused. There is no clear requirements of the project for example global constraints must be used or not. On 31 October 2018, Phuc implemented 2 models and submitted the report and model to Pierre. However, there was not any feedback from Pierre until Phuc reminded him. The feedback was sent on 13 November 2018. Phuc already revised the model and report as Pierre's comments and submitted to him on 14 November 2018 and he is waiting for Pierre's feedback. Related to the revision of ISP. Phuc asks Justin and Pierre for revision of ISP. numerous times. But his supervisors refuse to revise from times to times. (1) On 26 April 2018, Phuc firstly asked for revision of ISP in the email sending to his supervisors, but they refused. (2) Some months later, on 29 August 2018, Phuc again sent an email that request Pierre and Justin to revise his ISP, but they refused again. (3) On 28 September 2018, Phuc repeated the revision of ISP again in his email sending to Justin and Pierre. Since Justin and Pierre (as the second supervisors) decided to use the old ISP form which disagrees with the announcement sending by Elisabeth Lindqvist on 13 August 2018 saying that "The new form must be used also for revisions, ...". Phuc asked Pierre and Justin about those matters, but they didn't clarify. Without clarification, Justin and Pierre peremptorily decided to use the old forms. Justin clearly says that he doesn't care about Phuc's ideas. Pierre also agrees with Justin. Phuc repeatedly says that he disagrees with information in the ISP that Justin or Pierre sent to him. The research goals are unreasonable and there are not any discussion and clarification about those goals yet. In the email sending to Justin and Pierre on 23 October 2018, Phuc clearly writes that except sections 1, 3, 4, 6, 7, and 8, he disagrees with other sections which means that he also disagree with the research goals. On 08 November 2018, Phuc also clearly writes that except some sections 1—8, 10, 11, and 12, he disagrees with all other sections, which means once again he certainly disagrees with the research goals. Although Justin and Pierre know that Phuc disagrees with the ISP including the research goals, they don't have any feedbacks and refuse Phuc's comments. All sections in ISP are needed to discuss. So, the beginning of 3 months ISP is valid from the signing date."

<sup>-</sup> Phuc submitted the  $\sim$ 40 pages survey. Phuc already built the repository for case studies. Within a short amount of time, ones could not require the best quality survey. Phuc expects to get feedback and comments for the survey and repository as soon as possible so that he could improve the survey timely.

<sup>- 1</sup>DL451 course project: (a) Phuc expects the teacher could clarify the requirements in the very beginning of the project. The specification requires a model with 5 given test cases. The teacher requests more solutions and more test cases that are not requirements in the

specification just before the deadline. It puts Phuc under a lot of stress, which reduces Phuc's performance. (b) 1DL451 is a graduate course (<a href="https://www.antagning.se/se/search?">https://www.antagning.se/se/search?</a> publisher=uu&freeText=UU-11004&period=HT\_2018&lang=sv), however, as the main teacher of the course 1DL451 for many years, Pierre Flener insists that 1DL451 course is an undergraduate course, which is wrong. Phuc expects the teacher explains to grading criteria clearly, since the teacher seems to apply the grading criteria randomly, and mix up with grading criteria for master and/or bachelor students. (c) Pierre is too harsh in grading Phuc's report. Phuc fully achieved 3/6 requirements of project specification. The other 3 unfulfilled requirements are related to spelling and grammar errors (req. 3), code's comments (req. 4), and presentation without slide (req.2). Failing a student due to these reasons is too HARSH and not a pedagogical assessment. Phuc has a feeling like Pierre is intentionally making reprisals on Phuc due to conflicts between Phuc and Pierre before.

- Phuc asks for research plan towards Ph.D.
- Phuc requests prolongation which is (17 = 15,5 + 1.5) months due to the lack of supervision from 2016-06 to 2017-04, and no scientific supervision from 2017-08 to 2018-02. The previous ISP (2018-10-05) was approved without the consensus of Phuc and was valid from 2018-10-05 before approving on 2018-11-21. Phuc did not get any scientific advice from his supervisors, Justin and Pierre, in 1.5 months from 2018-10-05 to 2018-11-21.
- Phuc asks for having equal opportunities such as doing teaching as other Ph.D. students in the division.
- Phuc asks for having 6-month ISP. The 3-month study plan is too short, and a revision of 3 month ISP. The revision of ISP every 3 months is making his fatigue and depression.
- Phuc's paper was accepted at the CCGRID conference 2019, titles "Towards Efficient Solvers for Optimisation Problems".
- Phuc was accepted as a Student Volunteer for the ETAPS conference 2019.
- Phuc plan to submit his papers and participate workshops and conferences this year.
- The last date of Phuc's Ph.D. was calculated wrong, which should be 20201215.
- Phuc disagrees with the research goal "- If another re-examination is granted, complete the two credits of 1DL451 project" which is NOT in the previous ISP. Phuc also clearly said that he disagrees with the previous ISP which was approved in 20181005."

2018	Name of the Contract of the Co						2019			
	Feb	March	April	Oct	Nov	Dec		March	April	
	Learn MiniZinc	Learn MiniZinc	Demonstrate Skill with Minizinc	Revise Study Plan	Continue looking into the literature on reformulation n, symmetry breaking etc.	Start writing a document with lots of examples of reformulation n of Minizinc models.	Revise Study Plan	Study formal logic and proof assistants and continue on maintaining the repositary of reformulatio ns.	Study formal logic and proof assistants and continue on maintaining the repositary reformulatio	
		Sick leave 100%	Sick leave 100% 2018-03-14 to 2018-04-16	Look into the literature on reformlation, symmetry breaking etc.				Look into how to formalise Minizinc	Look into how to formalise Minizinc	
			50% Sick leave 2018-04-17 to 2018-05-28	12.5% parental leave from 05 October to 23 December 2018			25% Parenta	l leave from (	25% Parental leave from 02 Jan to 01 Feb 2019	2019
2019										
May	June	July	Аид	Sept	Oct	Nov	Dec	4	hamispilanieryty.	
The goal here is to formualte concrete proposals for the comming reserach.										
Jan	Feb	March	April	Way	June	July	Aug	Sept.	Oct.	Nov.
	By this time we should have an implemented system and have a good first draft of your thesis. At this point we have to start recurring your opponent and organising your defence.									