Universida~de~Vigo

LISTA DE ASISTENTES

Membros da Comisión:
Carmen García Mateo (presidenta)
Manuel García Sánchez (secretario)
Rebeca P. Díaz Redondo
Mónica Fernández Barciela
Alberto Gil Solla
Martín Llamas Nistal
Roberto López Valcarce

Outros asistentes:
Pedro Rodríguez Hernández

Acta da sesión da Comisión Académica do Programa de Doutoramento Doc_TIC da Universidade de Vigo, de dezaseis de febreiro de dous mil dezasete, reunida as 11:30h na sala A010 da EE de Enxeñaría de Telecomunicación.

O Xoves, **día 16 de febreiro de 2017**, ás 11:30 horas, comezou a sesión da Comisión Académica do Programa de Doutoramento Doc_TIC, cos asistentes que figuran á marxe, sendo presidida pola catedrática Carmen García Mateo, e actuando como secretario o catedrático Manuel García Sánchez

A orde do día contén os seguintes puntos:

1. Informe da coordinadora.
2. Aprobación, se procede, de actas anteriores.
3. Admisión, se procede, de novos alumnos e asignación de liñas de investigación, titor e director.
4. Aprobación, se procede, dos orzamentos e distribución de bolsas de mobilidade para 2017
5. Avaliación anual do Plan de Investigación do alumno Manuel Gualberto Vasquez Vasquez
6. Asuntos de trámite.
7. Rogos e preguntas.

Punto 1. Informe da coordinadora

Non hai asuntos dos que informar.

Punto 2. Aprobación, se procede, de actas anteriores.

Apróbanse por asentimento a acta de data 9/2/2017

Punto 3. Admisión, se procede, de novos alumnos e asignación de liñas de investigación, titor e director.

Apróbase admitir ós alumnos relacionados no Anexo 1, coas liñas e titores indicados.

Acordase denegar a admisión ó alumno Joao José Fernandes Bento por non dispoñer de información suficiente para poder establece-la afinidade do máster cursado có perfil establecido na Memoria do programa de doutoramento Doc TIC.

Acordase denegar a admisión á alumna Ana María Ferreira Lopes Oliveira Pinto porque o Máster que ten cursado non se adecúa ó perfil establecido na Memoria do programa de doutoramento Doc TIC.

4.- Aprobación, se procede, dos orzamentos e distribución de bolsas de mobilidade para 2017

Apróbase a seguinte distribución do orzamento:

Bolsas de mobilidade (7 x 750 €)	5.250 €
Organización da xornada de seguimento	1.266 €
Conferencias de investigadores estraxeiros	1.500 €
Protocolo	500 €
Total	**8.516 €**

Apróbase a solicitude de bolsas de mobilidade e os criterios de avaliación de solicitudes recollidos no Anexo 2.

5. Avaliación anual do Plan de Investigación do alumno Manuel Gualberto Vasquez Vasquez

Avalíase negativamente o Plan de Investigación do alumno dado que, despois de seguir o proceso de establecido no programa de doutoramento, tanto a avaliación do director da Tese como da Comisión de Avaliación amosan que o Plan de Investigación non é aceptable e que non houbo melloría suficiente dende a anterior avaliación. O informe detallado no que se basea esta decisión aparece recollido nestes informes, que se axuntan a esta acta como Anexo 3.

6.- Asuntos de trámite.

Apróbase incorporar como co-director da Tese de Moisés Mera Iglesias ó doutor Antonio López Medina.

Apróbase o Plan de Investigación do alumno Francisco Parada Loira.

7.- Rogos e preguntas.

Non hai.

Non habendo máis asuntos que tratar, levántase a sesión.

O Secretario,

Manuel García Sánchez

VºBº
A Presidenta,

Carmen García Mateo

Anexo 1

Alumno	Titor	Liña
Freire Bastidas, Diego Mauricio	Ana Fernández Vilas	Arquitectura e servicios telemáticos
García Dávalos, Alexander	Jorge García Duque	Arquitectura e servicios telemáticos
Halawa , Mohamed	Rebeca P. Diaz Redondo	Arquitectura e servicios telemáticos
Al Geddawy, Yasser Hosni Hussien	Martín Llamas Nistal	Arquitectura e servicios telemáticos
Klaina , Hicham	Ana Vázquez Alejos	Comunicacións radio
Ortiz Lopez, Janet	J.C. López Ardao	Redes de datos
Maged Kamel, MennaAllah	Alberto Gil Solla	Arquitectura e servicios telemáticos
Mendoza Balcázar, Pablo José	Martín López Nores	Arquitectura e servicios telemáticos
Ramos Muguerza, Eduardo	J.L. Alba Castro	Procesado do sinal

Anexo 2.

- **Programa de doutoramento:**
Programa de doutoramento en Tecnoloxías da Información e as Comunicacións (DocTIC)
Crédito asignado: 5.250 € **euros**
Bolsas convocadas: 7

Nº Id. (1)	Tipo (2)	Perfil (3)	Nº de bolsas
	B	**Indistinto: estancia de investigación, asistencia a curso o escola de verán, asistencia a congreso para a presentación dunha comunicación**	7
Criterios de Valoración (4)			

Criterios de Valoración (4)

Méritos   curriculares   dos/as   solicitantes
10

Interese   do   desprazamento   proposto   para   o   programa   formativo
40

Calidade do centro de destino ou importancia do congreso/curso. Os congresos deberán ser internacionais e estar recollidos no Scopus. No caso de estancias de investigación, darase prioridade a que o centro de destino estea no extranxeiro e supoña un cambio de pais de residencia do estudante.   50

(1) Cubrirase na EIDO
(2) Indicar se é A,B,C ou D. A: 1000 €, B: 750 €, C: 500 €, D: 250 €
(3) Describir a actividade formativa de que se trate: estadía de investigación, asistencia a congreso, asistencia a curso, etc. Para actividades de distinta natureza deberán usarse liñas e descricións diferenciadas.
(4) Detallar ou concretar os criterios de selección e baremo, indicando a distribución dun máximo de 100 puntos. Como mínimo deberá conter os apartados indicados no apartado VII:
      Méritos curriculares dos/as solicitantes
      Interese do desprazamento proposto para o programa formativo
      Calidade do centro de destino ou importancia do congreso/curso

Academic year 2016-2017
EVALUATION RUBRIC: RESEARCH PLAN
PhD Program on Information and Communications Technology of the University of Vigo

Objective: Evaluation of the research activities carried out and defence of the research plan for the coming year. Precisely, it will be assessed the ability to effectively communicate scientific concepts and ideas to a scientific audience. The evaluation committee evaluates this requirement for all PhD candidates annually. This rubric will be completed by the evaluation committee and by the advisor(s)

Name of student: Manuel Gualberto Vásquez Vásquez   **Date of exam**: 1st of February 2017

Name(s) of reviewers: Juan Carlos Burguillo Rial   **Signatures:**

Criteria	High (3)	Medium (2)	Low (1)	SCORE
General (Layout of the poster) Poster Format	**Poster is organized correctly and clearly written**. Appropriate content is in each section of poster.	**Majority of poster is organized correctly.** Appropriate content found in majority of sections, but some information is misplaced. Some sections require additional clarification.	**Poster is not organized properly.** Majority of the information is placed in wrong section or missing.	2
Data Presentation in Tables and Figures	Data are presented clearly and accurately in tables & figures	Data presentation may be incomplete or lacking clarity.	Data presentation in tables and figures is incomplete and lacks clarity.	
References	Appropriate references and format	Some inappropriate citations and Format.	Few/zero citations listed.	

Criteria	High (3)	Medium (2)	Low (1)	SCORE
Motivation of the work Background & Technical Need Putting research in the context of the field	Clear description of the long-term technical goals will this work serve.	Fair description of the long-term technical goals will this work serve.	Poor description of the long-term technical goals will this work serve.	2
Objectives & Expected Significance	Clear statement of the question(s) that will be addressed.	Vague/unclear statement of the question(s) that will be addressed.	Statement of the question(s) that will be addressed is absent.	1
Research Plan Description of experimental/theoretical approach and analysis Next year planning	Clear description of the research strategy	Fair description of the research strategy	Poor or absent description of the research strategy	1
Analysis/interpretation of (preliminary) results Plan for placing results obtained into current state of the field Analyzed and interpreted research results/data effectively	Clear description of the expected results and plan for evaluating the results	Fair description of the expected results and plan for evaluating the results	Poor or absent description of the expected results and plan for evaluating the results	1

Criteria	High (3)	Medium (2)	Low (1)	SCORE
Critical Thinking: Demonstrated capability for independent research in the area of study, significant expertise in the area, and ability to make original contributions to the field	Good	Fair	Poor	2
Quality of Communication(*): Communicated research results and implications clearly and professionally in both (a) written and (b) oral form.	Good	Fair	Poor	1

(*) The advisors should only take into account the quality of written communication

Overall Assessment: The assessment of the overall performance of the student based on the evidence provided in items above.

CRITERIA	PERFORMANCE RATINGS			
	Research Plan Unacceptable NOT approved	**Research Plan Acceptable APPROVED**		
OVERALL	Poor (One or more Low Scores) Provide explanation and/or suggestions	Acceptable (0-2 High Scores)	Very Good (3-5 High Scores)	Excellent (6-7 High Scores)
	X			

Provide comments and/or suggestions:

This is my second evaluation of the work plan submitted by this student. The first one was done in June 2016.

Even I advised him to start his work with enough time to let me support his intermediate drafts, unfortunately he worked autonomously along these six months; and submitted his new poster only 10 days before (received on Friday 20th of January at 20:11) the deadline (Monday 30th of January).

The new topic and plan has no relation at all with the previous one, but the definition is still not precise:
- From the objectives of the thesis he wrote, I cannot understand what he pretends to do, and how he can contribute to the State of the Art.
- The Research Plan is ambiguous and has no relevance from a scientific point of view.
- The English written skills are very poor, and that also limit his capabilities to accomplish a valid Research Plan; which is the first basic step needed to perform a doctoral thesis in this PhD. program.

On the 25th of January I send my initial evaluation of the present poster to the candidate, pointing out the weak elements, and he still had 5 days to modify it and return a new version. On January 28th the candidate replies without modifying the poster, but supporting his work and criticizing my review.

Summarizing, in my opinion, the candidate has not submitted a valid Research Plan in this second attempt.

Academic year 2015-2016

EVALUATION RUBRIC: RESEARCH PLAN

PhD Program on Information and Communications Technology of the University of Vigo

Objective: Evaluation of the research activities carried out and defence of the research plan for the coming year. Precisely, it will be assessed the ability to effectively communicate scientific concepts and ideas to a scientific audience. The evaluation committee evaluates this requirement for all PhD candidates annually. This rubric will be completed by the evaluation committee and by the advisor(s)

Name of student: Vásquez Vásquez, Manuel Gualberto   **Date of exam**: February 15th, 2017

Name(s) of reviewers: Pedro S. Rodríguez Hernández   **Signatures:**

Inés García-Tuñón Blanca

Manuel Ramos Cabrer

Criteria	High (3)	Medium (2)	Low (1)	SCORE
General (Layout of the poster) Poster Format	**Poster is organized correctly and clearly written**. Appropriate content is in each section of poster.	**Majority of poster is organized correctly.** Appropriate content found in majority of sections, but some information is misplaced. Some sections require additional clarification.	**Poster is not organized properly.** Majority of the information is placed in wrong section or missing.	2
Data Presentation in Tables and Figures	Data are presented clearly and accurately in tables & figures	Data presentation may be incomplete or lacking clarity.	Data presentation in tables and figures is incomplete and lacks clarity.	
References	Appropriate references and format	Some inappropriate citations and Format.	Few/zero citations listed.	

Criteria	High (3)	Medium (2)	Low (1)	SCORE
Motivation of the work Background & Technical Need Putting research in the context of the field	Clear description of the long-term technical goals will this work serve.	Fair description of the long-term technical goals will this work serve.	Poor description of the long-term technical goals will this work serve.	2
Objectives & Expected Significance	Clear statement of the question(s) that will be addressed.	Vague/unclear statement of the question(s) that will be addressed.	Statement of the question(s) that will be addressed is absent.	1
Research Plan Description of experimental/theoretical approach and analysis Next year planning	Clear description of the research strategy	Fair description of the research strategy	Poor or absent description of the research strategy	1
Analysis/interpretation of (preliminary) results Plan for placing results obtained into current state of the field Analyzed and interpreted research results/data effectively	Clear description of the expected results and plan for evaluating the results	Fair description of the expected results and plan for evaluating the results	Poor or absent description of the expected results and plan for evaluating the results	NA

Criteria	High (3)	Medium (2)	Low (1)	SCORE
Critical Thinking: Demonstrated capability for independent research in the area of study, significant expertise in the area, and ability to make original contributions to the field	Good	Fair	Poor	NA
Quality of Communication(*): Communicated research results and implications clearly and professionally in both (a) written and (b) oral form.	Good	Fair	Poor	1

(*) The advisors should only take into account the quality of written communication

Overall Assessment: The assessment of the overall performance of the student based on the evidence provided in items above.

CRITERIA	PERFORMANCE RATINGS			
	Research Plan Unacceptable **NOT approved**	**Research Plan Acceptable** **APPROVED**		
OVERALL	Poor (One or more Low Scores) Provide explanation and/or suggestions	Acceptable (0-2 High Scores)	Very Good (3-5 High Scores)	Excellent (6-7 High Scores)
	X			

Provide comments and/or suggestions:

Our main concerns in the evaluation of this student's research plan in July 2016 were:
- Student has to focus his work: the objectives of the thesis should be more concrete.
- He has to define a real Research Plan. Currently he just shows some generic intents.

Six months later, after evaluating the new version of his work, we can conclude that the same problems persist. We did not see any significant improvement beyond some upgrade in the poster layout. Moreover, the student has changed the title and his generic objective with no justification. These changes have not helped to focus his work and reinforce our conclusions about the lack of definition of his research plan.

To better support our conclusions, we sought the opinion of an expert in the field and based on his comments we can further specify our conclusions as follows:
- It seems rather complex to understand what the proposal actually consists in, as it just enumerates a series of generic ideas about four concepts (cognitive sensing and SDR, FBMC, satellite communications, and neural networks), but it doesn't point out how the work is to be done in those fields; moreover their relationship is not explained at all.

  For example, a sequence of rather basic concepts of cognitive radio (concepts like "primary and secondary user", and "white spaces") are outlined, but the relationship with FBMC is not clarified (Is a communication scheme using FBMC set out and is there any advantage leveraged for the secondary users to make use of the channel in a more efficient way and causing less perturbations to the primary users, etc.?). Also, the use of neural networks combined with cognitive radio is mentioned, but the actual proposal is not explained yet (Are they going to be used in order to have a system able to gain experience about when transmission is possible and when it is not? What is the innovation with respect to previous proposals? Which kind of neural networks, training schemes, etc. are going to be used?)

- The section on "expected results" is also a mixture of concepts (one of the items is just a definition of "cognitive radio"), where neither the expected contributions nor the advances over existing proposals are clarified. Some buzzwords are used in that section, but not going into detail about what is the expected work in those areas:
  - Spectrum sensing methods: What is the specific subject? Radio technologies, signal processing, neural networks, ...?
  - FBMC, dynamic spectrum access, and satellite communications: How does FBMC apply in this case? Is it a new communication scheme, and, if not, what is the relationship with the current ones? What is the relationship between FBMC and cognitive sensing? Why focusing on satellite communications?
  - Neural networks: What is the actual proposal? How are they going to be used?

Summarizing, the poster is a mess of terms and concepts and, therefore, understanding the purpose of the research work is nearly impossible. It does not specify if the work will take place in the physical layer (in new mechanisms for signal sensing), in signal processing (using the FBMC schemes somehow in satellite communications), in neural networks (and, if so, what are the inputs and the outputs of those networks...), etc. Possible combinations of the mentioned concepts "one to one" could be devised (there are previous works on some of those combinations), but neither the poster nor the interview with the author allow for understanding the reach of a work combining all the aforementioned fields, i.e., they don't allow for envisioning the technique suggested by the title: "An interweave technique in Cognitive Radio of SDR applied to Satellite/Ground communication node how Artificial Neural Network".

In addition, the explanations that the student gave us at the meeting held by skype on February 15th reinforce our idea that his work plan has no true research contribution, but rather it focuses on development tasks.

Our last comment six months ago pointed out the student must improve a lot his English skills (spoken and written) for appropriate accomplishment of tasks of this PhD program. We notice almost no improvement in this subject, to the point that we had to use Spanish in the evaluation session, due to the impossibility to hold a conversation in English with the student. His new version of the poster also shows important problems with English language that make it difficult to understand some sections.