Sharing Session

with PhD students in Lyon

November 15th, 2022

Ni Luh Dewi Sintiari

- Born in *Singaraja, Bali, Indonesia (1992)*

- Now, a **junior lecturer in Computer Science study program** of Universitas Pendidikan Ganesha (*Ganesha University of Education*), in Singaraja, Bali, Indonesia (since January 2022).

EDUCATION

- **Ph.D. in Computer Science** at ENS de Lyon, France, at Laboratory LIP, supervised by Nicolas Trotignon (2018–2021)
- **M.Sc. in Computer Science** at ENS de Lyon, France (2016–2018)
- **B.A. (Edu) in Mathematics Education** at Ganesha University of Education Singaraja, Indonesia (2010–2014)
- Elementary & High School, in Singaraja, Bali, Indonesia (1998–2010)

Homeland

Alasangker Village

Bali, Indonesia

Educational background

Elementary

Junior high school

Senior high school

Universitas Pendidikan Ganesha

Road to France

July 2014 (BSc in Mathematics Education of Ganesha Univ. of Education

March 2015 (Hanoi, Vietnam)

September 2015 (scholarship from Ministry of Finance)

February 2016 (LoA for Master in CS of ENS de Lyon)

2016-2018 (MSc in CS of ENS de Lyon)

May 2017 (11 weeks internship in G-SCOP Lab Grenoble, in Graph Theory

October 2018 (start of PhD) Scholarship from CDSN (Contrats Doctoraux Spécifique Normalien)

Publications

1. P. Aboulker, I. Adler, E. J. Kim, N. L. D. Sintiari, and N. Trotignon, **“On the tree-width of even-hole-free graphs”**, CoRR, vol. Abs/2008.05504, 2021 (published in European Journal of Combinatorics).

2. M. Pilipczuk, N. L. D. Sintiari, S. Thomassé, and N. Trotignon, **“(Theta, triangle)-free and (even hole, k4)-free graphs. Part 2: Bounds on treewidth”**, CoRR, vol. Abs/2001.01607, 2021 (published in Journal of Graph Theory).

3. N. L. D. Sintiari and N. Trotignon, **“(Theta, triangle)-free and (even hole, k4)-free graphs. Part 1: Layered wheels”**, CoRR, vol. Abs/1906.10998, 2020 (published in Journal of Graph Theory).

Talks

1. e-PCC Seminar Series (online, April 2021)
   1. *“A survey on even-hole-free graphs (60 minutes)”*

2. 22e Journées Graphes et Algorithmes (online, November 2020)
   1. *“On the treewidth of even-hole-free graphs (20 minutes)”*

3. 21e Journées Graphes et Algorithmes, Bruxelles, Belgium (November 2019)
   1. *“Layered wheels (20 minutes)”*

4. 4th International Conference in Graph Theory and Information Security, Jember, Indonesia (July 2019)
   1. *“Problems around even-hole-free graphs (15 minutes)”*

5. 9th International Conference on Graph Theory, Bled, Slovenia (June 2019)
   1. *“Layered wheels (20 minutes)”*

6. Workshop on Even-Hole-Free Graphs, Belgrade, Serbia (April 2019)
   1. *“Even-hole-free graphs of large treewidth (30 minutes)”*

Teaching *(Activité Complémentaire Enseignement)*

1. Information Theory (Master) Fall 2020
2. Performance Analysis and Network (Master) Fall 2020
3. Introduction to Computer Science (Master) Fall 2020
4. Probability (Bachelor)
5. Information Theory (Master)
6. Cryptography and Security (Master)
7. Optimization and Approximation (Master)

Doctoral Training *(Formation Doctorale)*

1. Français langue étrangère CFLE 9223 Oral B1 (Centre de langue, ENS Lyon) - Formation á l'Insertion Professionnelle (22h)

2. Français langue étrangère CFLE 9204 B2 (Centre de langue, ENS Lyon) - Formation á l'Insertion Professionnelle (22h)

3. Cryptography and Security (M1 Informatique, ENS Lyon) - Formation Scientificque Complémentaire (20h)

4. Writing good scientific articles in English (LIP, ENS Lyon) - Formation á l'Insertion Professionnelle (7h)

5. Ecole Jeunes Chercheuses et Chercheurs en Informatique Mathematiques (EJCIM) - Formation Scientificque Complémentaire (16h)

6. B21 Cours de Français: Vivre en France (3 niveaux) / MOOC Formation á l'Insertion Professionnelle (44h)

Journal reviews/referees

1. Discrete Mathematics
2. Journal of Graph Theory
3. Electronic Journal of Combinatorics
4. Electronic Journal of Graph Theory and Applications

Scientific dissemination

1. **22e Journées Graphes et Algorithmes** (online due to COVID-19 November 2020)
2. **École de Jeunes Chercheurs en Informatique Mathématique 2020** (online, June 2020)
3. **ANR Digraph first meeting**, Cabasse, France (January 2020)
4. **21e Journées Graphes et Algorithmes**, Bruxelles Belgium (November 2019)
5. **Bordeaux Graph Workshop**, Talence, France (October 2019)
6. **Conference in Graph Theory**: A Tribute to Frédéric Maffray, Grenoble, France (September 2019)
7. **4th International Conference in Graph Theory and Information Security**, Jember, Indonesia (July 2019)
8. **9th International Conference on Graph Theory**, Bled, Slovenia (June 2019)
9. **Workshop on Even-Hole-Free Graphs**, Belgrade, Serbia (April 2019)
10. **20e Journées Graphes et Algorithmes**, Grenoble, France (November 2018)
11. **10th International Colloquium on Graph Theory and Combinatorics**, Lyon, France (July 2018)
12. **6th Seminar of Project ANR STINT**, Saint-Maurice en Valgaudemar, France (July 2017)

What I learnt ?

Work-life balance

Academic

- Passion on research
- Plan what will be done during 3-year PhD
  - Teaching, seminar, conferences, research visit, formation doct.
- Make a **dissertation plan** as early as possible
  - Publication
  - Start writing your dissertation
- **Time-management**
  - **Do not *procrastinate* !** Make a list of ***priority***

Non-academic

- Financial planning
- Sport, entertainment
- Social life
- Enough rest (physically & mentally)

COMMUNICATION
(*especially with your supervisor!*)

Seek for help, anytime you need !

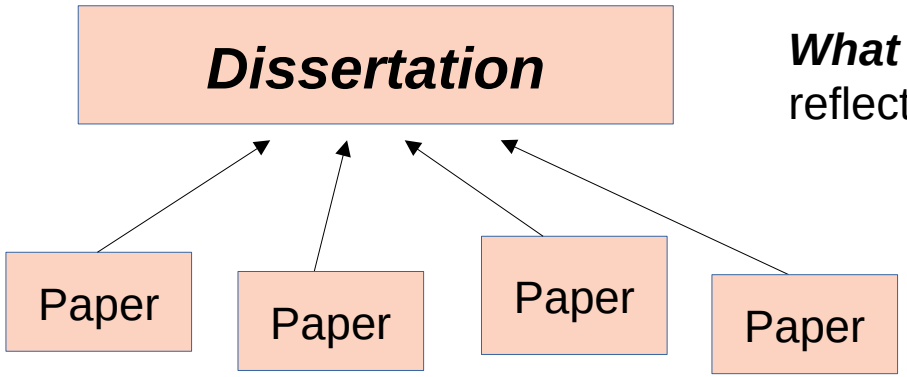
Difficulties *(my case)*

Homesickness (family)
Covid-19

↓

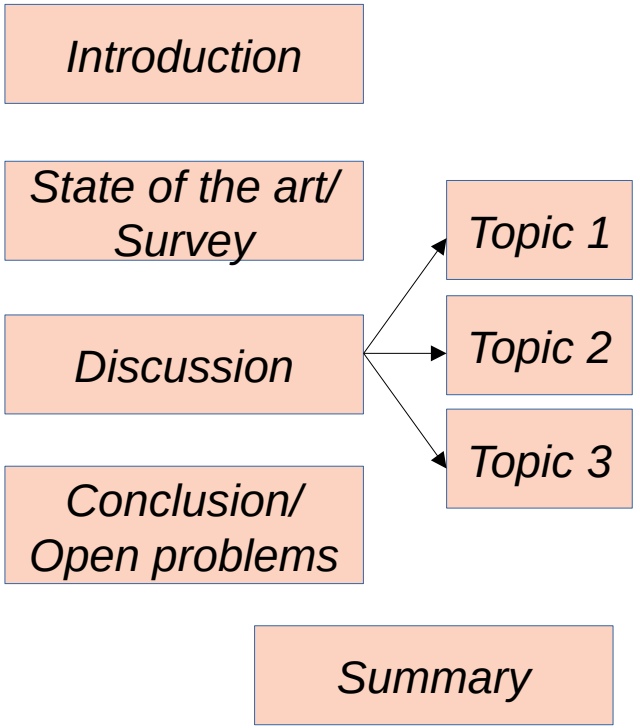
Low stress management

Writing Thesis/Disertation



What is it? → Formal research document that reflects the research process conducted for 3 years.

Find a ***connecting line***



Start writing as early as possible

Have a look at dissertations on our research area

COMMUNICATE *with your supervisor!*

Introduction

1. A brief background to the study
2. A problem statement
3. Your research questions
4. The significance of your study

State of the art

1. Related concept and preliminary research
2. A brief survey on the known results. I included a summary on each result, written in my own way.

Title: *Width parameters on even-hole-free graphs*

1.1. What is Graph Theory

- *Brief introduction to graphs*
- *An interesting example of the importance of graphs*
- *A piece of history of graph*
- *More advanced applications of graphs*

(e.g. why algorithms on graphs are important?)

These are written in a way that a non graph theorist *could grab* at least *the general idea of our dissertation*

1.2. Literature Review

- *Some important graph problems (related to the subject)*
- *Important definitions (relate them to real-world problem)*
- *Research motivation & problem statements, significance of the study*

1.3. Terminology

1.4. Main contributions of the thesis

Avoid plagiarism!

Discussion

1. A brief introduction to each topic;

2. Should not just copy-paste the paper, modify some parts if necessary;

3. One paper does not define one chapter. But it can be included in several chapters (depending on how the chapters are organized in the dissertation).

Conclusion

1. A brief summary on what have been discussed in the previous chapters

2. State interesting open problems, and possibly an approach toward the problems that we have tried.


Good Luck