INFORMATION ON DOCTORAL THESIS

1. Full name: Sanya Prasaeuth2. Sex: Male

3. Date of birth: 14/03/19624. Place of birth: Lao

5. Admission decision number: 259 Dated March 16, 2017, of the President of the University of Technology, Vietnam National University, Hanoi.

6. Changes in the training process: Adjust the set of instructions according to Decision No.

165/QD-DT dated February 22, 2019 of the President of the University of Technology, VNU.

7. Official thesis title: **RESEARCH ON DEVELOPMENT OF DEDICATED DATA SYSTEM FOR URBAN MANAGEMENT IN LAOS**

8. Major: Computer Science 9. Code: 9480101

10. Supervisors:

Assoc. Dr. Nguyen Thi Nhat Thanh

Dr. Bui Quang Hung

11. Summary of the **new findings** of the thesis:

- A survey of spatial data and urban management in Laos.

- A proposed application of remote sensing images and artificial intelligence

technology to generate spatial data for urban management in Laos.

- A proposed server architecture model and geospatial-one-stop portal architecture for the NSDI of Laos

12. Practical applicability, if any: Application in the construction and development of Spatial Data Infrastructure for the Lao People's Democratic Republic.

13. Further research directions, if any: Optimize data storage and analysis for the Spatial Data Infrastructure of Laos.

14. Thesis-related publications:

1. Sanya Praseuth, Dung Pham Tuan, Chuc Man Duc, Hung Bui Quang, Thanh Nguyen Thi Nhat, Mapping land cover types in Vientiane, Laos using multitemporal composite Landsat 8 images, 6th NAFOSTED Conference on Information and Computer Science (NICS), 2019 (published).

- Sanya Praseuth, Quang Hung Bui, Quang Thang Luu, Duc Van Ha, Tuan Dung Pham, Dominique Laffly, Spatial Data Infrastructure, Book Chapter, TORUS 2– Toward an Open Resource Using Services: Cloud Computing for Environmental Data, 2020 (published).
- Sanya Praseuth, Dao Le Quang, Dung Pham Tuan, Hung Luu Viet, Chuc Man Duc, Hung Bui Quang, Son Pham Bao, Annual land cover changes (2013-2023) in Vientiane, Lao PDR using timeseries composite Landsat 8 images, 2023 RIVF International Conference on Computing and Communication Technologies (RIVF), 2023 (published).