VIETNAM NATIONAL UNIVERSITY, HANOI
VNU UNIVERSITY OF ENGINEERING AND TECHNOLOGY

SOCIALIST REPUBLIC OF VIETNAM
Independence – Freedom – Happiness

INFORMATION ON DOCTORAL THESIS

1. Full name : Hoang Tieu Binh..... 2. Sex: Man.....
3. Date of birth: 10/06/1978..... 4. Place of birth: Nam Dinh.....
5. Admission decision number: 899/QĐ-ĐT .... Dated 08/11/2013.....
6. Changes in academic process: No..... .....
7. Official thesis title: Buiding a responsive student model in Intelligent Tutoring System.
8. Major: Information System..... 9. Code: 9480101.01 .....
10. Supervisors: Associate Professor Bui The Duy .....
11. Summary of the **new findings** of the thesis: .....

- Proposing a model of student ability assessment based on ability estimation, then applying it to Intelligent Tutoring Systems to support accurate assessment of learners' competency, helping support and interactive systems with more effective learners.
- Proposing a model to estimate the learner's competency based on learning style
- Proposing a model to evaluate the concentration of learners using machine learning methods.
- Proposing responsive student model based on learning style and real-time identification of student behavior in the classroom.

12. Practical applicability, if any: The topic has high applicability in building adaptive systems with real-time feedback, serving teaching and learning, especially meaningful in the process of digital transformation in education.
13. Further research directions, if any:

We possibly add some more parameters such as Bloom taxonomy, interactive parameters of learners in the learning time. Researching and building a complete Intelligent Tutoring Systems and doing experiment on a large scale to evaluate and verify the model.

14. Thesis-related publications: .....

[1] **Binh, H. T.**, & Duy, B. T. (2016). *Student ability estimation based on IRT*. In NICS 2016 - Proceedings of 2016 3rd National Foundation for Science and Technology Development Conference on Information and Computer Science (pp. 56–61).

[2] **Binh, H. T.**, & Duy, B. T. (2017). *Predicting Students' performance based on learning style by using artificial neural networks*. Proceedings - 2017 9th International Conference on Knowledge and Systems Engineering, KSE 2017, 2017-January, 48–53.

[3] **H. T. Binh**, M. T. Chau, A. Sugimoto and B. T. Duy, *Selecting active frames for action recognition with vote fusion method*. 2018 7th International Conference on Computer and Communication Engineering (ICCCE), Kuala Lumpur, 2018, pp. 161-166.

[4] **Binh, H. T.**, Trung, N. Q., Hoang-Anh, N.T, & Duy, B. T. (2019). *Detecting student engagement in classrooms for intelligent tutoring systems*. In The 23th International Computer Science and Engineering Conference (ICSEC2019).

[5] Q. T. Nguyen, **H. Tieu Binh**, T. D. Bui and P. D. N.T., *Student postures and gestures recognition system for adaptive learning improvement*. 2019 6th NAFOSTED Conference on Information and Computer Science (NICS), Hanoi, Vietnam, 2019, pp. 494-499.

[6] **Binh, H. T**., Trung, N. Q., and Duy, B. T. (2021). Responsive Student Model in an Intelligent Tutoring System and its Evaluation, *Journal Education and Information Technologies, Springer*, doi: 10.1007/s10639-021-10485-4, (**ISI/Q1, IF=3.078**)

Date: 30/07/2021	Date: 30/07/2021
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