Duc A. Hoang

Curriculum Vitae *Updated: September 10, 2020*

Personal Information

Full name (Vietnamese)	Hoàng Anh Đức.
Name (in publications)	Duc A. Hoang.
Gender	Male.
Nationality	Vietnamese.

Current Position

As of April 01, 2019, I am a **Postdoctoral Researcher** at School of Computer Science and Systems Engineering, Kyushu Institute of Technology (Fukuoka, Japan) under the direction of Toshiki SAITOH.

Contact Information

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Email (work)	`hoanganhduc@ces.kyutech.ac.jp`
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Personal Webpage	`https://hoanganhduc.github.io/`
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Education

Apr. 2015 - Jun. 2018 **PhD Degree in Information Science**

- **Institution:** Japan Advanced Institute of Science and Technology (Ishikawa, Japan).
- **Supervisor:** Ryuhei UEHARA.
- **Thesis Title:** Independent Set Reconfiguration and Related Problems for Some Restricted Graphs.

Apr. 2013 - Mar. 2015 **Master Degree in Information Science**

- **Institution:** Japan Advanced Institute of Science and Technology (Ishikawa, Japan).
- **Supervisor:** Ryuhei UEHARA.
- **Thesis Title:** The Independent Set Reconfiguration Problem on Some Restricted Graphs.

Sep. 2008 - Mar. 2013 **Bachelor Degree in Mathematics**

- **Institution:** VNU University of Science (Hanoi, Vietnam).
- **Thesis Advisor:** Thi Ha Duong PHAN.
- **Thesis Title:** The Matrix-Tree Theorem and Some Related Problems.

Languages

Vietnamese Native.

English Professional working proficiency.

Research Interests

- Graph Algorithms.
- Combinatorial Reconfiguration.

Employment

Apr. 01, 2019 - present **Postdoctoral Researcher** at Kyutech Algorithms Group, Department of Systems Design and Informatics, School of Computer Science and Systems Engineering, Kyushu Institute of Technology, Fukuoka, Japan. Supervisor: Toshiki SAITOH.

Sep. 05, 2018 - Dec. 31, 2018 **Lecturer** at Department of Informatics, Faculty of Mathematics, Mechanics and Informatics, VNU University of Science, Hanoi, Vietnam.

Research Visits

Dec. 23, 2019 - Dec. 25, 2019 Faculty of Advanced Science and Technology, Kumamoto University, Kumamoto, Japan. Host: Yota OTACHI.

Apr. 01, 2016 - Jul. 08, 2016 Algorithm Theory Lab, Graduate School of Information Sciences, Tohoku University, Sendai, Japan. Host: Xiao ZHOU and Takehiro ITO.

Professional Activities

(Sub-)Reviewer

Journal

- Journal of Information Processing (2020)
- Theoretical Computer Science (2018 – 2019)
- Discrete Applied Mathematics (2018)
- IEICE TRANSACTIONS on Fundamentals of Electronics, Communications and Computer Sciences (2017, 2019)

Conference

- WG 2020, COCOON 2020, ISAAC 2020
- MFCS 2019
- COCOON 2018

Teaching Experiences

A list of courses I have participated in as a **Lecturer** (in Vietnamese, **Giảng viên**) or **Teaching Assistant** (in Vietnamese, **Trợ giảng**). The courses in English (Vietnamese) are described in English (Vietnamese).

Sep. 10, 2018 - Dec. 13, 2018 **Giảng viên** – VNU-HUS MAT3302: Toán rời rạc

Sep. 06, 2018 - Dec. 13, 2018 **Giảng viên** – VNU-HUS MAT3302 2TNT: Toán rời rạc

Oct. 11, 2017 - Nov. 30, 2017 **Teaching Assistant** – JAIST I216: Computational Complexity and Discrete Mathematics.

Apr. 12, 2017 - Jun. 02, 2017 **Teaching Assistant** – JAIST I216: Computational Complexity and Discrete Mathematics.

Oct. 12, 2016 - Dec. 01, 2016 **Teaching Assistant** – JAIST I216: Computational Complexity and Discrete Mathematics.

Apr. 08, 2015 - Jun. 05, 2015 **Teaching Assistant** – JAIST I216: Computational Complexity and Discrete Mathematics.

Research Grants

Aug. 30, 2019 - Mar. 31, 2021 **JSPS KAKENHI Grant-in-Aid for Research Activity start-up**

- **Grant Number:** 19K24349.
- **Project Title:** A study on reconfiguration problems under Token Sliding and their applications.
- **Role:** Principal Investigator.

Awards

Jun. 22, 2018 JAIST Outstanding Performance Award for doctoral students.

Co-authors (in alphabetical order)

Erik D. Demaine, Martin L. Demaine, Eli Fox-Epstein, Takehiro Ito, Amanj Khorramian, Hirotaka Ono, Yota Otachi, Akira Suzuki, Ryuhei Uehara, Tsuyoshi Yagita, Takeshi Yamada.

Publications

A list of my publications can also be found at DBLP and Google Scholar. Some of them are available as preprint manuscripts at arXiv.

Journal

[1] Erik D. Demaine, Martin L. Demaine, Eli Fox-Epstein, Duc A. Hoang, Takehiro Ito, Hirotaka Ono, Yota Otachi, Ryuhei Uehara, and Takeshi Yamada. "Linear-time algorithm for sliding tokens on trees". In: *Theoretical Computer Science* 600 (2015), pp. 132–142. DOI: 10.1016/j.tcs.2015.07.037.

Refereed International Conference

[6] Duc A. Hoang, Akira Suzuki, and Tsuyoshi Yagita. "Reconfiguring k-path vertex covers". In: *Proceedings of WALCOM 2020*. Ed. by M. Sohel Rahman, Kunihiko Sadakane, and Wing-Kin Sung. Vol. 12049. LNCS. Springer, 2020, pp. 133–145. DOI: 10.1007/978-3-030-39881-1_12.

[5] Duc A. Hoang, Amanj Khorramian, and Ryuhei Uehara. "Shortest reconfiguration sequence for sliding tokens on spiders". In: *Proceedings of CIAC 2019*. Ed. by Pinar Heggernes. Vol. 11485. LNCS. Springer, 2019, pp. 262–273. DOI: 10.1007/978-3-030-17402-6_22.

[4] Duc A. Hoang, Eli Fox-Epstein, and Ryuhei Uehara. "Sliding tokens on block graphs". In: *Proceedings of WALCOM 2017*. Ed. by Sheung-Hung Poon, Md. Saidur Rahman, and Hsu-Chun Yen. Vol. 10167. LNCS. Springer, 2017, pp. 460–471. DOI: 10.1007/978-3-319-53925-6_36.

[3] Duc A. Hoang and Ryuhei Uehara. "Sliding tokens on a cactus". In: *Proceedings of ISAAC 2016*. Ed. by Seok-Hee Hong. Vol. 64. LIPIcs. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2016, 37:1–37:26. DOI: 10.4230/LIPIcs.ISAAC.2016.37.

[2] Eli Fox-Epstein, Duc A. Hoang, Yota Otachi, and Ryuhei Uehara. "Sliding token on bipartite permutation graphs". In: *Proceedings of ISAAC 2015*. Ed. by Khaled Elbassioni and Kazuhisa Makino. Vol. 9472. LNCS. Springer, 2015, pp. 237–247. DOI: 10.1007/978-3-662-48971-0_21.

[1] Erik D. Demaine, Martin L. Demaine, Eli Fox-Epstein, Duc A. Hoang, Takehiro Ito, Hirotaka Ono, Yota Otachi, Ryuhei Uehara, and Takeshi Yamada. "Polynomial-time algorithm for sliding tokens on trees". In: *Proceedings of ISAAC 2014*. Ed. by Hee-Kap Ahn and Chan-Su Shin. Vol. 8889. LNCS. Springer, 2014, pp. 389–400. DOI: 10.1007/978-3-319-13075-0_31.

PhD Thesis

[1] Duc A. Hoang. "Independent set reconfiguration and related problems for some restricted graphs". PhD thesis. Japan Advanced Institute of Science and Technology, June 2018. URL: http://hdl.handle.net/10119/15431.