



Yudai Tanabe

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PERSONAL STATEMENT

I'm a postdoctoral researcher of Computer Software Group, Department of Communications and Computer Engineering, Graduate School of Informatics, Kyoto University. I received Doctor of Science at Tokyo Institute of Technology under the supervision of Prof. Hidehiko Masuhara. I am also a member of Association for Computing Machinery.

RESEARCH INTEREST

My interest is on **types and programming languages**. I'm currently working on developing a new language mechanism for type-based compatibility/dependency analysis. I've also interested in the following topics:

- Advanced type systems, including effect/coeffect calculi and gradual type systems
- Meta-programming

EDUCATION

Doctor of Science <i>Tokyo Institute of Technology</i>	Apr. 2020 – Mar. 2023 <i>Tokyo, Japan</i>
Master of Science <i>Tokyo Institute of Technology</i>	Apr. 2019 – Mar. 2020 <i>Tokyo, Japan</i>
Bachelor of Science <i>Tokyo Institute of Technology</i>	Apr. 2014 – Mar. 2018 <i>Tokyo, Japan</i>

GRANTS AND FELLOWSHIPS

JSPS Grant-in-Aid for Research Activity Start-up <i>Japan Society for the Promotion of Science (JSPS)</i>	Oct. 2023 – Mar. 2025 <i>KAKENHI 23K19961</i>
JSPS Research Fellowship for Young Scientists (DC2) <i>Japan Society for the Promotion of Science (JSPS), (Declined on Mar. 2023)</i>	Apr. 2022 – Mar. 2024 <i>KAKENHI 22KJ1313 / 22J14382</i>
Tokyo Tech Tsubame Scholarship <i>Tokyo Institute of Technology</i>	Apr. 2020 – Mar. 2022

JOB EXPERIENCE

Postdoctoral Researcher <i>Computer Software Group, Kyoto University</i> <ul style="list-style-type: none">• Research on Gradual Typing	Apr. 2023 – Mar. 2025 <i>Kyoto, Japan</i>
JSPS Research Fellow (DC2) <i>Japan Society for the Promotion of Science (JSPS)</i>	Apr. 2022 – Mar. 2023 <i>Tokyo, Japan</i>
IBM Research Tokyo Student Intern (Paid Intern) <i>IBM Research Tokyo</i> <ul style="list-style-type: none">• Research and Development on a Java Compiler	Nov. 2021 – Dec. 2021 <i>Online</i>
Research Assistant <i>Tokyo Institute of Technology</i> <ul style="list-style-type: none">• Research and Development on Live Programming Environment	May. 2021 – Present <i>Tokyo, Japan</i>

IBM Research Tokyo Student Intern (Paid Intern)

Jul. 2018 – Aug. 2018

*IBM Research Tokyo**Tokyo, Japan*

- Research and Development on a Java Compiler

Editorial & Technical Assistant

Mar. 2014 – Present

*MYU Research**Tokyo, Japan*

- Editorial & Technical Support for Scientific Journal (Sensing Technology, Applied Physics)

TEACHING EXPERIENCE**Programming I (Teaching Assistant)**

2019 – 2020

*Tokyo Institute of Technology**Tokyo, Japan***Introduction to Computer Science (Teaching Assistant)**

2018 – 2020

*Tokyo Institute of Technology**Tokyo, Japan***Introduction to Information Literacy (Teaching Assistant)**

2018 – 2020

*Tokyo Institute of Technology**Tokyo, Japan*

TECHNICAL SKILLS**Languages:** Haskell, OCaml, Java, Scala, SQL, JavaScript, HTML/CSS

PUBLICATIONS (PEER-REVIEWED)**Compilation Semantics for a Programming Language with Versions**

2023

Yudai Tanabe, Luthfan Anshar Lubis, Tomoyuki Aotani, and Hidehiko Masuhara

- In Programming Languages and Systems. APLAS 2023. Lecture Notes in Computer Science, vol 14405.

A Step toward Programming with Versions in Real-World Functional Languages

2022

Yudai Tanabe, Luthfan Anshar Lubis, Tomoyuki Aotani, and Hidehiko Masuhara

- In Proceedings of the 14th International Workshop on Context-Oriented Programming: Advanced Modularity for Run-time Composition (COP '22).

BatakJava: an Object-Oriented Programming Language with Versions

2022

Luthfan Anshar Lubis, Yudai Tanabe, Tomoyuki Aotani, and Hidehiko Masuhara

- In Proceedings of the 15th International Conference on Software Language Engineering (SLE '22).

A Functional Programming Language with Versions

2022

Yudai Tanabe, Luthfan Anshar Lubis, Tomoyuki Aotani, and Hidehiko Masuhara

- In the Journal of *The Art, Science, and Engineering of Programming*, Vol. 6, No. 1, 2022.

A Context-Oriented Programming Approach to Dependency Hell

2018

Yudai Tanabe, Tomoyuki Aotani, and Hidehiko Masuhara

- In Proceedings of the 10th International Workshop on Context-Oriented Programming: Advanced Modularity for Run-time Composition (COP '18). ACM, New York, NY, USA, 8-14.

INVITED TALKS**A Language to Safely Exploit Multi-Version Modules at the Expression-level**

Jul. 2021

*Yudai Tanabe**Online*

- In the 13th Workshop on Context-Oriented Programming: Advanced Modularity for Run-time Composition (COP 2021).

ACADEMIC SERVICE

APLAS 2024 SRC & Posters <i>Organizer, Selection Committee, and Judge</i>	2024 Kyoto, Japan
PLDI 2024 Research Artifacts <i>Artifact Evaluation Committee</i>	2024 Copenhagen, Denmark
ICCQ 2024 <i>Program Committee</i>	2024 Russia
APSEC 2023 SRC <i>Program Committee</i>	2023 Soeul, Korea
APLAS 2023 SRC & Posters <i>Judge</i>	2023 Taipei, Taiwan
ICSME 2023 Industry Track <i>Program Committee</i>	2023 Bogotá, Colombia
COP 2023 <i>Organizing Committee and Program Committee Chair</i>	2023 Seattle, USA
ICCQ 2023 <i>Program Committee</i>	2023 St. Petersburg, Russia
COP 2022 <i>Organizing Committee and Program Committee Chair</i>	2022 Online
PeerJ Computer Science <i>Reviewer</i>	2022 Online
PEPM History Project <i>Organizing Committee</i>	2022 Online
Scheme 2021 <i>Reviewer</i>	2021 Online
PPL 2021 <i>Panelist (Social Event)</i>	2021 Online
Onward! Essays 2020 <i>Co-reviewer</i>	2020 Online
SPLASH/ECOOP 2020 <i>Student Volunteer</i>	2020 Online