

Shuntaro Togo

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EDUCATION

B.S. Agricultural and Environmental Engineering April 2020 - March 2024
Kyoto University, Kyoto

M.S. Environmental Science and Technology April 2024 - Present
Kyoto University, Kyoto

- **Coursework:** Hydrology, Numerical analysis, Stochastic differential equations, Dynamical systems
- Graduation thesis and abstract
(https://github.com/togoshun/Undergraduate/blob/master/grad_thesis.pdf)
(https://github.com/togoshun/Undergraduate/blob/master/grad_abstract.pdf)

RESEARCH EXPERIENCE

Mathematical analyses of subsurface water flows April 2023 - Present
Investigating the analytical solution of the Boussinesq groundwater equation, which governs the groundwater movement.

Stochastic processes for a porous media equation April 2023 - Present
Applying stochastic processes to the Boussinesq groundwater equation in the same way as the stochastic porous media equation.

CONFERENCE PARTICIPATIONS

- Shuntaro Togo, Koichi Unami: “Porous media equations to visualize subsurface water flows” Fieldnet Lounge Symposium Visualizing Diverse Socio-Environmental Systems: Toward Robustness Beyond Resilience, 2023.
(abstract: https://fieldnet-aa.jp/lounge/.assets/20231203_abstract.pdf)
- Shuntaro Togo, Koichi Unami, Masayuki Fujihara: “One-dimensional Boussinesq equations with time-locally unbounded boundary conditions” Japan Society of Agricultural and Rural Engineering, Applied Hydraulic Research Division, 2024.
(abstract (Japanese): https://www.jsidre.or.jp/wordpress/wp-content/uploads/2024/11/ouyouR6proceedings_241130.pdf)

ADDITIONAL EXPERIENCE

Teaching assistant April 2024 - Present
Helped discussions, experiments, and fieldwork in the undergraduate class, “Laboratory Course in Hydraulics.” Assisted in the class, “Hydraulics”. Assisted in grading assignments of the class, “Water-Use Systems Engineering”.

Research assistant

August 2024 - Present

Research assistance relating to ‘Kyoto University School of Platforms’ (KUSP) to make a platform analyzing information from the real world and sharing it with society.

(KUSP: <https://www.platforms.ceppings.kyoto-u.ac.jp/en/>)

TECHNOLOGIES

Programming languages

C++, C, Python, bash