Yuka Takahashi

https://yamaguchi1024.github.io/

EDUCATION

The University of Tokyo

Tokyo, Japan

Bachelor of Science in Information Science. Major GPA: 3.98/4.0

April 2015 - March 2020

Email: yukatkh@is.s.u-tokyo.ac.jp

Advisor: Prof. Takeo Igarashi

SELECTED PUBLICATIONS AND TALKS

• Painters View: Automatic Suggestion of Optimal Viewpoints for 3D Texture Painting

Yuka Takahashi, Tsukasa Fukusato, Takeo Igarashi

In ACM SIGGRAPH Asia 2019 technical brief (Overall Acceptance Rate 20%).

• Migrating Large Codebases to C++ Modules

Yuka Takahashi, Oksana Shadura, Vassil Vassilev

In Journal Proceedings of 19th International Workshop on Advanced Computing and Analysis Techniques in Physics Research (ACAT) 2019.

• Stitch: An Interactive Design System for Hand-Sewn Embroidery

Yuka Takahashi, Tsukasa Fukusato

In ACM SIGGRAPH 2018 poster (Overall Acceptance Rate 21%).

ACM SIGGRAPH Student Research Competition 3rd Place Award.

• Optimizing Frameworks' Performance Using C++ Modules-Aware ROOT

Yuka Takahashi, Vasil Georgiev Vasilev, Raphael Isemann

In Journal Proceedings of 23rd International Conference on Computing in High Energy and Nuclear Physics (CHEP) 2018.

• A Better Shell Command-line Autocompletion for Clang

Yuka Takahashi

In LLVM developer's meeting 2017 Lightning Talk.

EXPERIENCE

UC Berkeley, CA

Research Internship Student

August 2019 - September 2019

Worked on Halide Scheduling Tool under a supervision of Prof. Jonathan Ragan-Kelley.

CERN Geneva, Switzerland

Research and Development Intern

March 2018 - February 2019

Worked on Cling C++ interpreter and Clang C++ Modules in ROOT team.

Google Summer of Code

Remote

GSoC Student

April 2017 – August 2017

Worked on a dynamic shell autocompletion project in LLVM/Clang organization.

TEACHING AND MENTORING EXPERIENCE

Google Summer of Code

Remote

Mentor April 2019 - August 2019

Advised an undergraduate student on Global Modules Index project at HEP software foundation.

Security Mini-Camp

Japan

Lecturer September 2019

Honored to give a compiler lecture to young students in the government-funded security lecturing project.

Involved Projects

- ROOT An open-source data analysis framework widely used in High Energy Physics field. Committer and an everyday contributor since March 2018. Maintaining Cling C++ interpreter and developing ROOT Runtime C++ Modules.
- LLVM/Clang An open-source compiler infrastructure. Committer and a regular contributor since 2017. Maintaining autocompletion feature and options in Clang Driver and developing C++ Modules in Clang ASTReader.

GRANTS

- Funai Overseas Scholarship Fellowship for Ph.D. study in the U.S. from September 2020 to August 2022.
- Research Internship Grant The university of Tokyo Study and Visit Abroad Program (SVAP), 2019.
- Travel Grant The university of Tokyo Computer Science Alliance, 2019.
- Travel Grant LLVM organization, 2017.