

Kento Aoyama

Affiliation:

Department of Computer Science, School of Computing, Tokyo Institute of Technology

Education Academy of Computational Life Sciences (ACLS), Tokyo Institute of Technology

Current Status: Ph.D. Student
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URL: <https://metavariabe.github.io/>
Date of Birth: 27th Nov. 1990
Place of Birth: Toyama, Japan
Citizenship: Japan

Education:

2015 M.Sc. in Eng., Tokyo Institute of Technology, Japan.
2013 B.Sc. in Eng., The University of Electro-Communications, Japan.
2011 A.Sc. in Eng., National Institute of Technology, Toyama College, Japan.

Employment:

April 2015 – Sept. 2016 Software Developer, Fujitsu Ltd.

Current Research Interests:

High Performance Computing, Parallel/Distributed Computing, Cloud Computing,
Container Virtualization, Micro-Service Architecture, Bioinformatics, Machine Learning.

Relevant Skills

- Infrastructure Engineering: Management of computing cluster and cloud computing environment, and deployment of application containers (e.g. Docker, Shifter).
- Software Development: Object oriented design pattern programming, Continuous Integration (CI).
- C, C++: High-performance programming skills as CUDA, OpenMP, MPI, etc.
- Java: Android Applications and other general object oriented programming.
- Python, R, MATLAB: Statistical Analytics, Machine Learning, Computing Simulation.
- UNIX system administration.

Publications:

Peer-reviewed Domestic Journal Papers

- **Kento Aoyama**, Masanori Kakuta, Yuri Matsuzaki, Takashi Ishida, Yutaka Akiyama, "Development of Exome Analysis Pipeline on the K Computer", IPSJ Transactions on Advanced Computing System(ACS), No.9, Vol.2, pp.15-33, 2016.

Domestic Conferences (without peer review)

- **Kento Aoyama**, Yuki Yamamoto, Masahito Ohue, Yutaka Akiyama, "Evaluation of Container Virtualized MEGADOCK System in Distributed Computing Environment", IPSJ SIG Technical Report, 2017-BIO-49(3), pp.1-8. 2017.
- **Kento Aoyama**, Masanori Kakuta, Yuri Matsuzaki, Takashi Ishida, Yutaka Akiyama, "Large-scale Parallelization of Exome Analysis Pipeline on K-computer", IPSJ SIG Technical Report, 2014-BIO-38(33), pp.1-7. 2014.

Poster Presentations

- **Kento Aoyama**, Yuki Yamamoto, Masahito Ohue, Yutaka Akiyama, "Large-Scale Parallelization of Cloud Native PPI-System using Container Virtualization", ACLS International Summer School 2017, Sep. 2017.
- **Kento Aoyama**, Yuki Yamamoto, Masahito Ohue, Yutaka Akiyama, "High-Performance Protein-Protein Interaction Predictions on Distributed Containerized Environment", High Performance Computing Symposium 2017 (HPCS 2017), Jun. 2017.
- **Kento Aoyama**, Masanori Kakuta, Yuri Matsuzaki, Takashi Ishida, Yutaka Akiyama, "Large-scale Parallelization of Exome Analysis Pipeline on K-computer", ACLS International Summer School 2014, Aug. 2014.

Awards:

- Runner-Up Award, ACLS International Summer School 2017 Group Work, 2017.
- Outstanding Student Award, IPSJ Hokuriku Branch, 2010.