

# Soichi Hayashi

DevOps engineer with 16 years of professional experience

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## EXPERIENCE

### UIITS / Research Technologies — *Software Engineer*

May / 2015 - PRESENT

Developed back & frontend applications in reusable microservices for various scientific fields. Applications abstracted complex HPC/HTC workflows through a simple web UIs. Implemented high availability infrastructure with Keepalived and administered Docker hosts monitored by sensu, and ELK based logging system with OpenStack.

### UIITS / Open Science Grid — *Software Engineer*

May 2008 - May 2015

Developed back & frontend applications for Open Science Grid allowing operation team to easily organize topological information of OSG computing resources, to synchronize support tickets across different ticketing systems, and to orchestrate x509 certificate issuance and revocation workflows accredited by IGTF.

Designed and implemented DHTC workflows that can execute large gene sequence queries - cutting execution time from a month to days by mapping blast DB segments and then reducing the statistical results.

### Acxiom, Conway, AR — *Software Developer*

2001 - April 2008

Built UIs and backend systems for business intelligence and analytics platform for EMC. Developed BI system that allowed CapitalOne to run their credit scoring model in 15 minutes instead of 8 hours. Provided company's first grid only data processing pipeline for Discover Financial. Implemented security auditing portal for Citigroup.

## EDUCATION

### Henderson State University, Arkadelphia, AR — B.S. Computer Science / B.S. Physics

2001

Built HSU's first beowulf cluster. Developed tree structured nbody simulation algorithm and 3D visualization system for campus planetarium and presented at statewide academic conference.

## Technology Sets

Javascript/node, Python, Java, PHP, C/C++.

Docker, RHEL6/7, Ubuntu, sensu, ELK. LVS/Keepalived, nginx, RabbitMQ, Jira, git, TravisCI, pm2, OpenStack

Mongo, MySQL, Oracle, Cassandra, Redis

Angular, React, Bootstrap, Zend, jQuery, less.

## Publications

Galaxy based BLAST submission to Open Science Grid resources [2014 PoS \(ISGC2014\) 025](#)

GOC-TX: A Reliable Ticket Synchronization Application for the Open Science Grid [2013, J. Phys.: Conf. doi:10.1088/1742-6596/331/8/082013](#)

The event notification and alarm system for the Open Science Grid operations center [2012 J. Phys.: Conf. Ser. 396 032105 doi:10.1088/1742-6596/396/3/032105](#)

## Nationality

Japanese Native, US Citizen.