

# Deployment of Virtual Cluster on a Commercial Cloud Platform for Molecular Docking and Elasticity of the Clusters

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# Overview

- Objective: upload a virtual machine that runs a protein-ligand interaction simulating program (Dock6) onto FutureGrid
- Purpose: having Dock6 onto the commercial cloud will allow tasks to be performed cheaply and efficiently
- 3 areas will be investigated:
  - Elasticity of the clusters (Katy)
  - Fault tolerance of the system (Derek)
  - Use of several virtual clusters on various commercial clouds to form a single system (Anthony)

# Week 1: Creation of Virtual Machines and Attempts to Install Dock6 and Hadoop

- Created FutureGrid accounts for the future
- Created new virtual machine “Prime Test” as a test
- Worked on the project proposal to submit to FutureGrid
- Practiced creating Virtual Machines on the NAIST virtual cluster
- Attempted to install Hadoop on the “Prime Test” VM – still running into a few problems when trying to access Hadoop services in browser
- Transferred Dock6 file from personal laptop to the “Test 1” VM
- Attempted to install Dock6 on “Test 1”- ran into errors that are to be looked upon more

# Coming up: Next Week

- Submission of the project proposal to FutureGrid
- Creation of Dr. Haga and Ichikawa-Sensei's FutureGrid accounts
- Completion of the proper installation of Hadoop on “Prime Test” VM
- Completion of the proper installation of Dock6 on “Test 1” VM
- Continuation of the creation of VMs

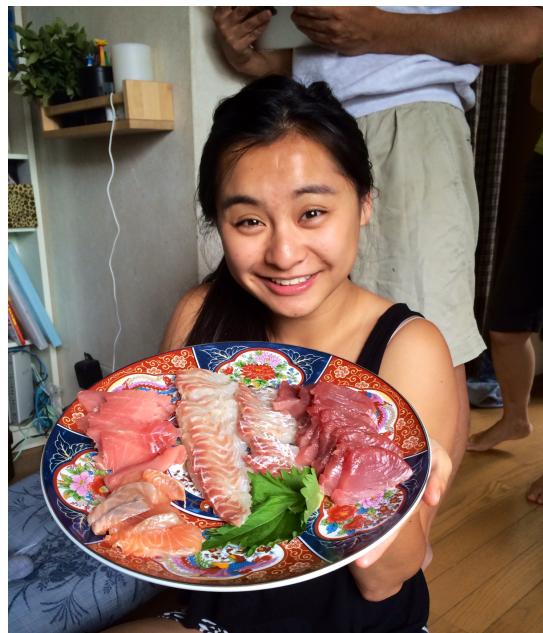
# Exploring the Culture

- Visit of Nara's Todaiji Temple
- Visit of the Osaka Castle
- Wandering through Dotonburi in Osaka
- Visit of the Umeda Sky Building in Osaka

PRIME 2014

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