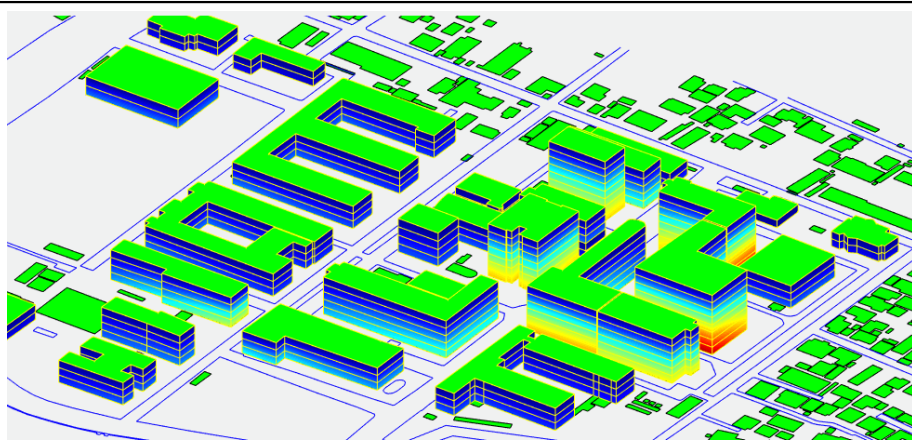




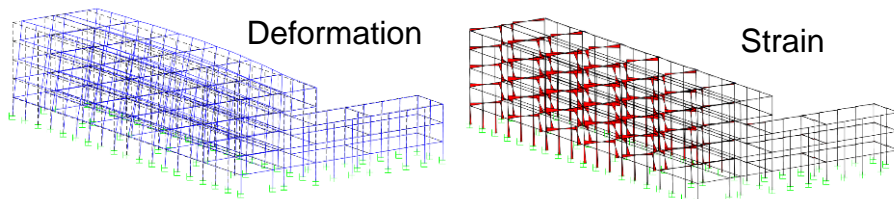
Faculty of  
Science and  
Technology  
Tokushima University

# Structural Response Simulation for Earthquake and Tsunami

## Associate Professor Narutoshi Nakata



Regional Earthquake Simulation (Tokushima University)



3D Detailed Earthquake Simulation (Civil Eng. Building)



Seismometer on a  
Single-Board  
Processor



Structural Testing in Hybrid  
Simulation

### Content:

My research activities are directed toward disaster mitigation with a primary focus on development of structural simulation techniques and emergency disaster information system. Currently, I am working on the integration of seismological network and regional earthquake simulation that can provide prompt estimates and assessment of structural conditions after earthquakes and tsunamis.

### Ongoing research projects include:

- Development of GIS-based structural modeling techniques that enable modeling of large number of structures and regional earthquake simulation
- Visualization techniques for structural damage and conditions in high-fidelity simulation
- Development of seismological network using single-board processor like raspberry pi
- Hybrid simulation techniques that combine numerical simulation and experimental study

Keywords : Earthquake Engineering,  
Structural Dynamics

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