The research concerns about the civil infrastructures’ general mechanical performance which includes the load-carrying capacity, the fatigue damage mechanism and the serviceability, etc. through the experimental and numerical ways. A variety of the field or laboratory tests including not only the static ones but also the dynamic ones such as the impact tests and the fatigue tests are being carried out. Moreover, the numerical simulations and analysis are also in process by using general commercial software and self-developed programs for verifying the test results and analyzing the performance observed in tests.

Master/Doctor course: Education policy, curriculum, typical activity in the laboratory

<M aster course>
At the beginning of the first academic year, every fresh master course student will have a face to face discussion with the supervisor on the research plan and the future career in April. Then the research activity can be started under the supervisor’s academic direction. Meanwhile, a number of courses will be provided. At the end of the first academic year, there will be an intermediate examination on the research progress. After that, the research should be continued and the graduation thesis preparation should be finished before the end of the last January. In addition, for those students who have plans to find jobs in Japan after graduation, the job hunting activities probably should be arranged in the first half of the second academic year.

<Doctoral course>
The doctoral course student should have more and frequent discussions with the supervisor and the research collaboration group to carry out the research.

Daily life in the laboratory, etc.
The computer and desk are provided for each student. Meanwhile, the lab is with the good research atmosphere assisting the students to focus on the research and study.

Message or comments by the laboratory faculty staffs
Do good job of research, and do not waste your research life.

Recent Master theses in these 3 years (+ more if appropriate)

<table>
<thead>
<tr>
<th>year.month</th>
<th>Thesis title (including English translation of Japanese thesis title)</th>
</tr>
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<tbody>
<tr>
<td>2020.3</td>
<td>Study on evaluation of the deterioration for road bridge slab using influence line</td>
</tr>
<tr>
<td>2020.3</td>
<td>Study on deterioration diagnosis of concrete slab using impact load</td>
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<td>Study on performance evaluation of rockfall protection fence</td>
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<td>Noise removal and anomaly detection of bridge monitoring data by using statistical methods</td>
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<td>Soundness Evaluation on ASR-Affected PC Bridge using Long-term Monitoring Method</td>
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<td>A study on deterioration characteristics of precast PC slab damaged by ASR and implementation of fly ash concrete</td>
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<td>A study on experiments and FEM models for a rockshed composed of half-precast SRC members</td>
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<tr>
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<td>Study on Mechanical Behavior of Concrete Bridge Slab with Degradation Phenomena</td>
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<td>2016.9</td>
<td>Study on structural damage assessment for deteriorated girder using static and dynamic responses</td>
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<tr>
<td>2015.3</td>
<td>Study on the estimation of bridge weigh in motion by using elastic supports.</td>
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<tr>
<td>2015.3</td>
<td>Study on the design method of the pocket type rockfall protection net.</td>
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<tr>
<td>2015.3</td>
<td>Study on the high energy absorption rockfall preventive pocket net.</td>
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<tr>
<td>2014.3</td>
<td>Infrasound characteristics radiated from the bridge with extended skew slab.</td>
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<tr>
<td>2014.3</td>
<td>Fundamental research on the dynamic response characteristics of the frame structure subjected to impact load for performance based design.</td>
</tr>
<tr>
<td>2014.3</td>
<td>Built of three-dimensional rock fall simulation technique and its use of evaluation to actual rockfall event.</td>
</tr>
<tr>
<td>2013.3</td>
<td>Estimation of bridge weight in motion of heavy vehicle by using Kalman filter.</td>
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<tr>
<td>2013.3</td>
<td>Study on the behavior of wire rope rockfall prevention fence and the impact position.</td>
</tr>
<tr>
<td>2013.3</td>
<td>Evaluation of elastic-plastic behavior of structures with sand cushion by the weight collision.</td>
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<td>A study on structural performances of reinforced concrete slab bridge and rigid-frame bridge with H-shaped steel girders</td>
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<tr>
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<td>Study on simplified estimation method on bending deformation of beam with sand cushion</td>
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<tr>
<td>2019.9</td>
<td>FUNDAMENTAL STUDY ON PERFORMANCE EVALUATION OF PROTECTION STRUCTURE FOR IMPACT BY ROCKFALL</td>
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<tr>
<td>2019.3</td>
<td>STUDY ON EVALUATION METHOD FOR DETERIORATED BRIDGE SLABS BY SELF-PROPELLED IMPACT VIBRATION EQUIPMENT</td>
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<tr>
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<td>A study on evaluation of load carrying capacity and maintenance of early deteriorated road bridge deck in Hokuriku district</td>
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<td>2018.3</td>
<td>A Study on the Dispute Risks Reduction Concerning Delay Analysis</td>
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<td>Structural health assessment for ASR-deteriorated PC girders using static and dynamic examinations</td>
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<td>A study on inspection method based on change of vibration characteristics on existing road bridges deteriorated by salt damage</td>
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<td>Study on Performance of Pocket-type Rockfall Protective Nets using Shock Absorber</td>
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<td>2013.9</td>
<td>Study of a rockfall protective fence based on both experimental and numerical approaches.</td>
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<tr>
<td>2013.9</td>
<td>Study on absorbing effect of sand cushion and behavior of rockfall protection fence with sand cushion subjected to impact load.</td>
</tr>
<tr>
<td>2013.9</td>
<td>Study on the dynamic response analysis method of structures under impact action through the fluid.</td>
</tr>
<tr>
<td>2013.9</td>
<td>The extension and application of the displacement function in isotropic elastic body to bridge slab.</td>
</tr>
<tr>
<td>2013.3</td>
<td>Study on the prevention method for the road environmental vibration problem generated from the highway bridge vibration.</td>
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Laboratory mail address: Dr. Saiji Fukada <saiji*at*se.kanazawa-u.ac.jp>