

Name YAMAGUCHI Kohei	Job Title Associate Professor	Area of Expertise Bridge Engineering / Maintenance Management Engineering
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1. Main Research Topics

① Establishing efficient maintenance methods by analysis of inspection data for airport infrastructure and bridges managed by local governments

- ・開港40年以上経過
- ・インフラ構造物の老朽化
- ・未補修のインフラ構造物



効率的な維持管理が必要



② Development of bridge inspection and diagnosis support system using 3D data and image analysis



- ・個々の損傷の写真撮影が必要
- ・損傷写真や損傷図は2次元
- ・2次元情報を基にした診断

多くの労力と時間がかかる



- ・点検・診断の時間短縮
- ・人員とコストの削減
- ・オンライン診断の可能性



一の瀬橋

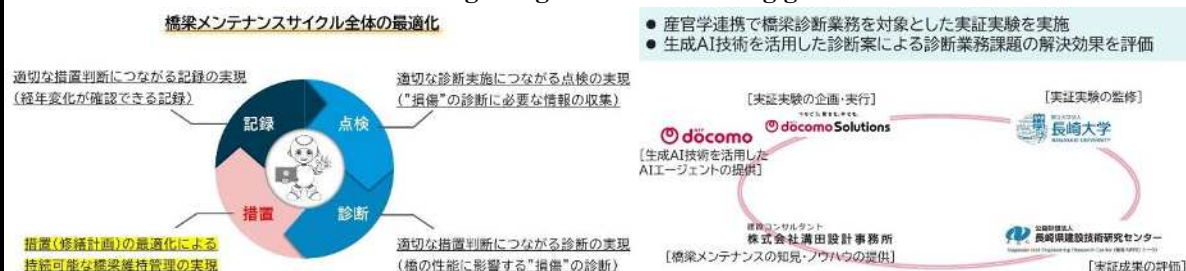
長さ	13.5m
幅	4.8m
架設年	1663年
所在地	長崎市本町内町



眼鏡橋

長さ	22m
幅	3.65m
架設年	1634年
所在地	長崎市東の町と西の町 町の境

③ Establishment of an efficient bridge diagnosis method using generative AI



④ Estimation of internal defect shape in concrete using computed tomography and three-dimensional unsteady conduction analysis

2. Keywords

Infrastructure, Bridges, Maintenance, Inspection and diagnosis, Municipal support

3. Remarks and Websites

Laboratory: : <https://nagasakibridgelab.wixsite.com/mysite>

Our lab. aims to tackle three pillars of themes in line with social needs: short-term, medium-term, and long-term. Our lab. focuses on the construction, renewal, and maintenance of social infrastructure in general, but mainly bridges. Our lab. also collaborates with our laboratory alone, management organizations (local governments, airport management organizations), and companies (NTT Domo Solutions, AGC, KOBLCO, etc.).