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Paper on risk-informed optimal bridge maintenance strategy selected as Editor's Choice

Work by Xu Han '23 PhD and CEE Professor Dan M. Frangopol highlighted by editors of ASCE-ASME Journal of Risk and Uncertainty Part A: Civil Engineering

A paper co-authored by [Xu Han '23 PhD](#) and civil and environmental engineering professor [Dan M. Frangopol](#) has been selected as the [Editor's Choice article](#) in the current edition [Vol. 8, Issue 4 (December 2022)] of *ASCE-ASME Journal of Risk and Uncertainty Part A: Civil Engineering*.

Titled "Risk-Informed Bridge Optimal Maintenance Strategy Considering Target Service Life and User Cost at Project and Network Levels," the paper "investigates the impact of several factors on the risk-informed optimal maintenance strategy for a bridge network under corrosion, including target service life, user cost estimation approach, and correlation among bridge safety margins."

Considering these critical factors in determining optimal maintenance strategy, the authors say, has not been previously undertaken in a detailed manner and represents an advance in the field.

Han will graduate from Lehigh University in January with a PhD in structural engineering. He also holds a master's degree and a Bachelor of Applied Science in civil engineering from Tongji University in China.

During his PhD studies, Han was advised by Frangopol, who is Lehigh's inaugural Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture and a world-renowned expert in bridge safety and maintenance management, structural systems reliability, and life-cycle civil engineering.

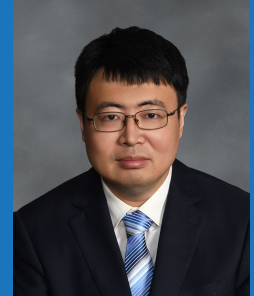
Read more about Frangopol's research and achievements [here](#).

Related Links:

- [ASCE-ASME Journal of Risk and Uncertainty Part A: Civil Engineering: "Risk-Informed Bridge Optimal Maintenance Strategy..."](#)
- [LinkedIn: Xu Han](#)
- [Research website: Dan M. Frangopol](#)

Department/Program:

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Xu Han will graduate from Lehigh University in January 2023 with a PhD in structural engineering.



Professor Dan M. Frangopol is the inaugural Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture at Lehigh University.

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