

## APPLICATION OF CONTEMPORARY PROGRAMMING TECHNIQUES IN HEALTH MONITORING SOFTWARE FOR SUSPENSION BRIDGES

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### **Abstract:**

Computer software for the data analysis and processing was developed to improve the data processing capability of the bridge health monitoring system. The .NET framework 4.0, Windows 7 operation system, Microsoft Visual Studio 2010 and SQL server 2008 were employed as tools for the operation of the software. Some of the contemporary programming techniques were adopted in the development of the software for structural health monitoring software of suspension bridges. Real-time measurements were used to test and verify the developed software. The results indicated capabilities of the software for data analysis and processing. Rational and correct decisions can be made for the assessment of suspension spanning structure using the early warning received through the proposed software.

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