Budapest University of Technology and Economics
Faculty of Mechanical Engineering
Department of Fluid Mechanics
http://www.ara.bme.hu/

FINAL PROJECT ASSIGNMENT

Publicly Available

Identification			
Name: **Zhang Haitian**			ID: **73348055144**
Code of the Curriculum: 2NAMW0		Specialisation: 2NAMW0-FM	Document ref. number: GEÁT:2020-1:2NAMW0:JWH8V0
Curriculum: Master Program in Mechanical Engineering Modelling			
Final Project issued by: Department of Fluid Mechanics		Final exam organised by: Department of Fluid Mechanics	
Supervisor: Dr. Csaba Horváth (71949162105), assistant professor			

Project Description	
Titée	**Further development of the ROSI beamforming method for the investigation of turbomachinery investigated at an angle** ROSI nyalábformálási módszer továbbfejlesztése szögben lévő forgógépek vizsgálatára
Details	1. Literature survey regarding beamforming methods, with emphasis on those which are relevant for tur-bomachinery applications 2. Understanding the standard time domain beamforming method 3. Understanding the ROSI beamforming method 4. Further development of the ROSI beamforming method for the investigation of turbomachinery investi-gated from an angle in a Matlab environment. 5. Testing, debugging, and further development of the code with the help of virtual noise sources. 6. Testing, debugging, and further development of the code with the help of real noise sources. 7. Summary of the work as required in the course description
Advisor	Advisor's Affiliation: -

Final Exam			
1st subject (group)	2nd subject (group)	3rd subject (group)	4th subject (group)
ZVEGEÁTMW02 Computational Fluid Dynamics	**ZVEGEÁTMW03** Flow Measurements	**ZVEGEVGMW07** Flow stability	**ZVEGEVGMW08** Theoretical Acoustics

Authentication		
Handed out: 15 September 2020		Deadline: 11 December 2020
Compiled by: Dr. Csaba Horváth (71949162105) Supervisor	Verified by: *Dr. János Vad* (signed) Head of Department	Approved by: *Dr. Péter Bihari* (signed) Vice-Dean
The undersigned declares that all prerequisites of the Final Project have been fully accomplished. Otherwise, the present assignment for the Final Project is to be considered invalid. …….. *Zhang Haitian*		