

Norwegian University of Science and Technology Faculty of Engineering

DIPLOMA

Yaolin Ge

born 20 October 1996

has 1 June 2020 been awarded the degree

Master of Science in Maritime Engineering

Programme of Study: Maritime Engineering

Study Track: Small Crafts

Thesis Title: Development of an underwater ruler using an AUV-deployed

beacon and Matched filter CFAR detector

The diploma is issued 12 October 2020.

Dean of Faculty

Faculty Officer



DIPLOM

Kungliga Tekniska högskolan gör veterligt att

Yaolin Ge

har avlagt examen och förklaras därav för

TEKNOLOGIE MASTER

Stockholm, 18 december 2020

SIGBRITT KARLSSON,

Rektor

Norwegian University of Science and Technology

Transcript of records



Name: **Ge, Yaolin** National identity: 201096 27578

Study programme: Mathematical Sciences

The student has completed the following examinations at Norwegian University of Science and Technology:

Grade 1)
distribution

					distribution
Course		Semester	Credits	Grade	ABCDE
Other courses					
IDT8000	Research Ethics	2020 autumn	2.5	Passed	_
TMA4315	Generalized Linear Models	2020 autumn	7.5	Α	10
IØ8906	Research based innovation	2021 spring	2.5	Passed	
MA8004	Mathematical Sciences Seminar for PhD-students - mini	2021 spring	2.5	Passed	
MA8701	Advanced statistical methods in inference and learning	2021 spring	7.5	Passed	
MA8702	Advanced Computer Intensive Statistical Methods	2021 spring	7.5	Passed	
TMR4115	Design Methods	2018 autumn	7.5	В	
TMR4190	Finite Element Methods in Structural Analysis	2018 autumn	7.5	Α	
TMR4305	Advanced Analysis of Marine Structures	2018 autumn	7.5	Α	_
TMR4320	Simulation-Based Design	2018 autumn	7.5	Α	
TMR4120	Underwater Engineering, Basic Course	2019 spring	7.5	Α	
TMR4217	Hydrodynamics for High-Speed Marine Vehicles	2019 spring	7.5	В	
TMR4220	Naval Hydrodynamics	2019 spring	7.5	Α	
TMR4290	Marine Electric Power and Propulsion Systems	2019 spring	7.5	Α	
NFUT0101	Norwegian for Foreigners 1	2020 autumn	15	В	
NFUT0203	Norwegian for Foreigners 2	2021 spring	15	Α	
NFUT0301	Norwegian for Foreigners 3	2021 autumn	15	С	
		Total:	135.0	_	

¹⁾ For an explanation of the grade distribution, see the last page.

Norwegian University of Science and Technology

Transcript of records



Name: **Ge, Yaolin** National identity: 201096 27578

Study programme: Mathematical Sciences

Credit system and grading

The academic year normally runs from mid-August to mid-June and lasts for 10 months. Courses are measured in "studiepoeng", considered equivalent to the European Credit Transfer System standard (ECTS credits). The full-time workload for one academic year is 1500 - 1800 hours of study / 60 "studiepoeng".

The Norwegian grading system consists of two grading scales: one scale with the grades pass or fail and one graded scale from A to E for pass and F for fail. The graded scale has the following qualitative descriptions:

A	Excellent	An excellent performance, clearly outstanding. The candidate demonstrates excellent judgement and a very high degree of independent thinking.
В	Very good	A very good performance. The candidate demonstrates sound judgement and a high degree of independent thinking.
С	Good	A good performance in most areas. The candidate demonstrates a reasonable degree of judgement and independent thinking in the most important areas.
D	Satisfactory	A satisfactory performance, but with significant shortcomings. The candidate demonstrates a limited degree of judgement and independent thinking.
E	Sufficient	A performance that meets the minimum criteria, but no more. The candidate demonstrates a very limited degree of judgement and independent thinking.
F	Fail	A performance that does not meet the minimum academic criteria. The candidate demonstrates an absence of both judgement and independent thinking.

The assessment is criterion referenced.

Grade distribution

The distribution of grades is shown by the percentage for courses using the graded scale A – F. Fail (F) is not included in the distribution. All results from the last five years are included in the calculation. The distribution is also shown for courses that have been active for less than five years. There has to be at least 10 approved results during the period.



Official Transcript of Records

Yaolin Ge 19961020-5537 2020-09-22

Complete	ed courses	Scope	Grade	Date	Note
SD2709	Underwater Technology	7.5 hp	Α	2019-10-18	1
PRO1	Project	(7.5 hp)	Α	2019-10-18	1
DD2325	Applied Programming and Computer Science	7.5 hp	Α	2020-01-10	1
LAB1	Laboratory Work	(1.5 hp)	Р	2019-12-18	2
LAB2	Laboratory Work	(1.5 hp)	Р	2019-12-18	2
LAB3	Laboratory Work	(1.5 hp)	Р	2019-12-18	2
TEN1	Examination	(3.0 hp)	Α	2020-01-10	1
EQ2300	Digital Signal Processing	7.5 hp	С	2020-01-11	1
PRO1	Project Assignment	(1.0 hp)	Р	2019-12-01	2
LAB1	Laboratory Work	(0.5 hp)	Р	2019-12-11	2
TEN1	Examination	(6.0 hp)	С	2020-01-11	1
SD2711	Small Craft Design	10.0 hp	В	2020-01-14	1
PRO1	Project	(10.0 hp)	В	2020-01-14	1
SD271X	Degree Project in Naval Architecture, Second Cycle	30.0 hp	Р	2020-08-12	2
XUPP	Examination Question	(30.0 hp)	Р	2020-08-12	2
Credited	education	Scope	Grade	Date	Note
Creditin	g based on:				
at Norwa Norwa Credited		7,5 Credits			
Creditet	Course within the programme	7.5 hp		2020-08-17	
Craditia	g based on:	7.0 Πρ		2020 00 -11	
Creditiir	Naval Hydrodynamics	7,5 Credits			
at Norwa	wegian University of Science and Technology,	7,5 Orcuits			
Credited	d as:				
	Course within the programme	7.5 hp		2020-08-17	
Creditin	g based on:				
	Design Methods	7,5 Credits			

Credited education	Scope	Grade	Date	Note
at Norwegian University of Science and Technology, Norway				
Credited as:				
Course within the programme	7.5 hp		2020-08-17	
Crediting based on:				
Finite Element Methods in Structural Analysis	7,5 Credits			
at Norwegian University of Science and Technology, Norway				
Credited as:				
Course within the programme	7.5 hp		2020-08-17	
Crediting based on:				
Advanced Analysis of Marine Structures	7,5 Credits			
at Norwegian University of Science and Technology, Norway				
Credited as:				
Course within the programme	7.5 hp		2020-08-17	
Crediting based on:				
Simulation-Based Design	7,5 Credits			
at Norwegian University of Science and Technology, Norway				
Credited as:				
Course within the programme	7.5 hp		2020-08-17	
Crediting based on:				
Underwater Engineering, Basic Course	7,5 Credits			
at Norwegian University of Science and Technology, Norway				
Credited as:				
Course within the programme	7.5 hp		2020-08-17	
Crediting based on:				
Hydrodynamics for High-Speed Marine Vehicle	s 7,5 Credits			
at Norwegian University of Science and Technology, Norway				
Credited as:				
Course within the programme	7.5 hp		2020-08-17	

60 credits (hp) represent a full academic year.

Notes

- 1 Grading scale: Excellent (A), Very Good (B), Good (C), Satisfactory (D), Sufficient (E)
- 2 Grading scale: Pass (P)

The above is an excerpt from the register of student records.



DEPARTMENT OF NAVAL ARCHITECTURE, OCEAN & MARINE ENGINEERING

23 Feb 2018

To whom it may concern,

This is to certify that Mr Yaolin GE was registered, registration number: 201749363 , as a full-time student at the Department of Naval Architecture, Ocean and Marine Engineering Department for the period of 11 Sept 2017- 15 Dec 2017. He has taken and passed the following modules:

Class	Description	Results	Credit
21452	FINITE ELEMENT ANALYSIS FOR MARINE STRUCTURES	82	10.0
NM402	THEORY AND PRACTICE OF MARINE CFD	75	10.0
NM404	SHIP STRUCTURAL DYNAMICS	91	10.0
NM423	SEAKEEPING AND MANOEUVRING	77	20.0
NM439	HIGH PERFORMANCE SAILING YACHTS	89	10.0
	Credits Awarded for Session	n ACAD17/18	60.0

Yours sincerely

Peilin Zhou

Professor of Marine Engineering

Associate Head of Department Internationalisation and Recruitment

University of Strathclyde Department of Naval Architecture, Ocean and Marine Engineering Henry Dyer Building 100 Montrose Street Glasgow, G4 0LZ Scotland, UK www.strath.ac.uk/nacm

Department of Naval Architecture, Ocean & Marine Engineering, Henry Dyer Building, 100 Montrose Street, Glasgow, G4 0LZ, Scotland, UK, REF UK TOP 20 RESEARCHwww.strath.ac.uk/naome t:44 (0) 141 548 4094





CERTIFICATE OF COMPETENCY

This NVIDIA DLI Certificate has been awarded to

Yaolin Ge

for the successful completion of Fundamentals of Accelerated Computing with CUDA Python

Will Ramey

Will Rancy

Senior Director, Developer Programs



5 Courses



Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

Structuring Machine Learning Projects

Convolutional Neural Networks

Sequence Models



04/15/2020

Yaolin Ge

has successfully completed the online, non-credit Specialization

Deep Learning

The Deep Learning Specialization is designed to prepare learners to participate in the development of cutting-edge AI technology, and to understand the capability, the challenges, and the consequences of the rise of deep learning. Through five interconnected courses, learners develop a profound knowledge of the hottest AI algorithms, mastering deep learning from its foundations (neural networks) to its industry applications (Computer Vision, Natural Language Processing, Speech Recognition, etc.).

Adjunct Professor Andrew Ng Computer Science

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of

Verify this certificate at: coursera.org/verify/specialization/5GW84LB3N6FY



04/15/2020

Yaolin Ge

has successfully completed

Software Design Methods and Tools

an online non-credit course authorized by University of Colorado System and offered through Coursera

Albert E. Glock, Jr.

Albert Glock Instructor Computer Science

COURSE CERTIFICATE



Verify at coursera.org/verify/GJQKTVKTS3HA

Coursera has confirmed the identity of this individual and their participation in the course.



COURSE CERTIFICATE

04/15/2020

Yaolin Ge

has successfully completed

Structuring Machine Learning Projects

an online non-credit course authorized by deeplearning.ai and offered through Coursera



Adjunct Professor Andrew Ng Computer Science

Verify at coursera.org/verify/H4AUQ4ZF4E8Y

Coursera has confirmed the identity of this individual and $\mbox{their participation in the course}. \label{eq:course}$



COURSE CERTIFICATE

04/08/2020

Yaolin Ge

has successfully completed

Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning

an online non-credit course authorized by deeplearning.ai and offered through Coursera



Laurence Moroney

Laurence Moroney Staff AI Advocate Google Brain

Verify at coursera.org/verify/XA2YKGGZYL7H

Coursera has confirmed the identity of this individual and their participation in the course.

CS50 congratulates

Yaolin Ge

on completion of CS50x, including ten problem sets, nine labs, and one final project.

Awarded from Cambridge, Massachusetts, in the year two thousand twenty-three.

David J. Malan

Gordon McKay Professor of the Practice of Computer Science Harvard University



