Yaolin Ge

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PERSONAL INFORMATION

Date of Birth: October 20, 1996
Place of Birth: Shaanxi, China
Citizenship: Chinese
Gender: Male

EDUCATION

Aug. 2019 – Present	**KTH Royal Institute of Technology, Stockholm, Sweden** **M.S. Maritime Engineering**
Aug. 2018 – Jun. 2019	**Norwegian University of Science and Technology, Trondheim, Norway** **G.P.A. 3.93/4.00** **M.S. Marine Technology**
Sept. 2017 – Jan. 2018	**University of Strathclyde, Glasgow, United Kingdom** **G.P.A. 3.85/4.00** **B.S. Naval Architecture & Ocean and Marine Engineering**
Sept. 2014 – Jun. 2018	**Jiangsu University of Science and Technology, Zhenjiang, China** **G.P.A. 3.89/4.00** **B.S. Naval Architecture & Ocean Engineering**

PROJECT EXPERIENCE

Aug. 2019 – present

Research on the Signal Processing of Underwater Beacons for AUVs

KTH & Swedish Maritime Robotics Centre (SMaRC), Stockholm, Sweden

- Upgraded the firmware of the sonar microcontroller
- Commissioning the sonar hardware setup environment
- Prepared to do site tests in both open air and underwater environments
- To Signal process returned echoes and set proper noise filter
- To implement on large projects such as LoLo

Supervisors: Peter Sigray, Professor; Martin Ludvigsen, Professor

Aug. 2019 – Dec. 2019

Maribot Vane 2.0 Design Project

KTH & SMaRC (Swedish Maritime and Robotic Center), Stockholm, Sweden

- Designed and built the Maribot Vane 2.0, an autonomous sailing vessel
- Engineered and manufactured the glass fibre-made rudder
- Evaluated the mechanical behaviour under certain load contions for most of 3D printed parts as well as parts made from composite materials
- Studied and assessed the performance of the components made from composite materials in terms of weight and strength

Supervisors: Jakob Kuttenkeuler, Professor; Stefan Hallström, Assoc. Professor

Jan. 2019 – Jun. 2019

Project on the acoustic sensing seabed survey of a virgin wreck site

The Applied Underwater Robotics Laboratory, Trondheim, Norway

- Prepared the seabed sensing survey equipment, such as LAUV Fridtjøf with sensors like SSS, CTD profiler, DVL, GPS, Camera etc.
- Planned the appropriate preliminary underwater survey paths considering the bathymetry & topology of the seabed
- Conducted the field trip on board R/V Gunnerus to collect data
- Post-processed and documented the acoustic images for further research

Supervisor: Martin Ludvigsen, Professor

Jan. 2018 – Jun. 2018 **Research on the dynamic response of flexible risers under VIV load**
Bachelor's thesis, Jiangsu University of Science and Technology, Zhenjiang

- Studied the VIV phenomenon and physics behind VIV and summarised the current research model and developed the time-domain VIV model for low mass ratio system considering added mass effect
- Conducted the sensitivity analysis for different top tension force, current velocity as well as mass ratio working conditions

Supervisor: ZHOU Hong, Professor; WANG Kunpeng, Aassociate Professor

PROFESSIONAL QUALIFICATIONS

Personal Skills:

FEA analysis using Abaqus & ANSYS APDL; Programming language with C/C++, Python & MATLAB; Foil analysis using XFoil; CFD analysis using Star-CCM+; CAD modelling with Solidworks/AutoCAD; Simulation with Simlink (Simevents); 3D FDM printing; Microsoft Office; Latex

Languages:

English (fluent)
Chinese (native)

AWARDS

2019	Intel® Edge AI Scholarship, Intel
2019	Best Popular Prize, AI + Art in Robot Dancing Competition, PKU
2017	First Prize, Academic Competition in Mechanics Knowledge, JUST
2016 – 2017	National Scholarship, MOE
2015	Honourable Mention, Xuediao Structural Innovative Design Contest, JUST
2015	National Encouragement Scholarship, MOE
2014	First Prize, Diesel Engine Assembly & Disassembly Contest, SIYANG

PROFESSINOAL MEMBERSHIPS

The Royal Institute of Naval Architects (RINA)
Kongl. Skeppssällskapet

EXTRA-CURRICULAR

Jul. 2019 – Aug. 2019 **Summer campus student**
Peking University, Beijing, China

- Applied OpenPose algorithm to achieve the motion capture activities
- Applied the motion mapping tool to convert 2D motions to 3D skeleton ones
- Programmed Yanshee Robot to dance following human motions

Oct. 2014 – Jun. 2018 **Team Leader**
Student Volunteer Association, Zhenjiang, China

- Organised in local and on-campus volunteering activities regularly

REFEREES:

Mehdi Zadeh (Ph.D.) Associate Professor	Hybrid Power Systems Laboratory (HPS), NTNU mehdi.zadeh@ntnu.no	 +47 73413202
Tahsin Tezdogan Senior Lecturer	Department of NAOME, University of Strathclyde tahsin.tezdogan@strath.ac.uk	 +44 (0)141 548 4532
ZHOU Hong Professor	Department of Naval Architecture and Ocean Engineering, JUST zjcyzh@163.com	 +86 1365 6136 398

INTERESTS

Running, bicycling, swimming, Taekwondo, cross-country skiing