**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.) Hybrid Power Systems Laboratory (HPS), NTNU

Associate Professor [mehdi.zadeh@ntnu.no](mailto:mehdi.zadeh@ntnu.no) +47 73413202

Tahsin Tezdogan Department of NAOME, University of Strathclyde

Senior Lecturer [tahsin.tezdogan@strath.ac.uk](mailto:tahsin.tezdogan@strath.ac.uk) +44 (0)141 548 4532

ZHOU Hong Department of Naval Architecture and Ocean Engineering, JUST

Professor [zjcyzh@163.com](mailto:zjcyzh@163.com) +86 1365 6136 398

**INTERESTS**

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