# 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 (Adviser Prof. Kuttenkeuler)

**Thesis: Small Craft Design** 

Aug. 2018 – Jun. 2019 Norwegian University of Science and Technology, Trondheim, Norway

G.P.A. 3.93/4.00

M.S. Marine Technology (Co-adviser Prof. Ludvigsen)

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. 3.81/4.00

**B.S. Naval Architecture & Ocean Engineering** 

#### RESEARCH EXPERIENCE

Aug. 2019 – present

## Project on the Hydrodynamic Manoeuvrability for AUVs

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

- Analysed the equations of motion for underwater vehicles
- Analysed all lift and drag components for the flap (tail foil) on the vehicles
- Determined total hydrodynamic load on the AUV
- Simulated the manoeuvring behaviour for the AUV
- Conducted the stability analysis for the AUV

Supervisors: Ivan Stenius, Associate Professor

Jan. 2019 - Jun. 2019

### **Projects on Hydrodynamics of High-Speed Marine Vehicles**

Department of Marine Technology, NTNU, Trondheim, Norway

- Conducted the numerical lifting line analysis for the lift and drag of T-foils and rudder
- Analysed resistance, propulsion power and manoeuvrability for three types of high-speed marine crafts
- Evaluated other relevant hydrodynamic aspects for high-speed vehicles such as ventilation, cavitation, wave-induced motions and free-surface effects

Supervisor: Sverre Steen, Eirik Bøckmann, Marilena Greco

Jan. 2019 – Jun. 2019

### Project on the design of a propeller using lifting line theory

Department of Marine Technology, NTNU, Trondheim, Norway

- Investigated linear foil theory and propeller characteristics
- Applied numerical lifting line method to optimise the propeller design
- Conducted various experimental testing for the propeller at Marin Teknikk

Supervisor: Kourosh Koushan, Professor

## PROFESSIONAL QUALIFICATIONS

#### **Personal Skills:**

Computational Fluid Dynamic Analysis using Star-CCM+; Programming language with C, C++, Python & MATLAB; CAD modelling with Solidworks/AutoCAD; Simulation with Simlink; 3D FDM printing; Microsoft Office; Latex

## Languages:

English (fluent) Chinese (native)

Norwegian (conversational)

## **AWARDS**

2019	Best Popular Prize, AI + Art in Robot Dancing Competition, PKU
2017	Merit Student, MOE
2017	First Prize, Academic Competition in Mechanics Knowledge, JUST
2016 - 2017	National Scholarship, MOE
2016	Second Prize Scholarship, CSSC Huangpu Wenchong
2015 - 2016	First Prize, Renmin Scholarship, MOE
2015	Honourable Mention, Xuediao Innovative Design Contest, JUST
2015	National Encouragement Scholarship, MOE
2015	Second Prize, Decelerator Assembly & Disassembly Contest, JUST
2014	Honourable Mention, CMIH Simulation Model Design Contest, JUST
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
	<ul> <li>Applied OpenPose algorithm to achieve the motion capture activities</li> </ul>
	• Applied the motion mapping tool to convert 2D motions to 3D skeleton ones
	<ul> <li>Programmed Yanshee Robot to dance following human motions</li> </ul>
Mar. 2017 – Apr. 2017	Interpreter Intern

IDP Education Ltd., Nanjing, China

• Organised the introduction events for university's admission committee and expected applicants. Interpreted, assisted applicants with communications with admission committees' representatives

Oct. 2014 - Jun. 2018 **Team Member** 

Student Volunteer Association, Zhenjiang, China

Participated in local and on-campus volunteering activities regularly

## DEFEDERS.

Kefekees: Kourosh Koushan (Ph.D.) Professor	Department of Marine Technology, NTNU kourosh.koushan@ntnu.no +47 735	94501
Mehdi Zadeh (Ph.D.) Associate Professor	Hybrid Power Systems Laboratory (HPS), NTNU mehdi.zadeh@ntnu.no +47 734	13202
Tahsin Tezdogan (Ph.D.)	Dept. of NAOME, University of Strathclyde	

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

### **INTERESTS**

Running, bicycling, swimming, fitness training, cross-country skiing