## 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

#### **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
- Evaluated the hydrodynamic behaviour under wave load conditions
- Studied and assessed the performance of the components made from composite materials in terms of weight and strength

Jan. 2019 - Jun. 2019

# Project on numerical analysis of a Wageningen B-screw series propeller

TMR4220 Naval Hydrodynamics, NTNU, Trondheim

- Analysed the propeller with induction-factor-enhanced lifting line method
- Investigated rake, skew and hub effects on the propeller blade
- Conducted an experimental testing in the towing tank at MARINTEK Supervisor: Kourosh Koushan, Professor

Jan. 2019 – Jun. 2019

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

Department of Marine Technology, NTNU, Trondheim

- 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

Supervisors: Sverre Steen, Eirik Bøckmann, Marilena Greco

Aug. 2017 – Jan. 2018

### Project on the investigation of flow pattern on a circular cylinder

NM402 Theory and Practice of Marine CFD, Univ. of Strathclyde, Glasgow

- Studied the vortex shedding phenomenon and physics behind VIV and applied the time-domain VIV model for low mass ratio system
- Reviewed analysis methods such as finite volume method and finite difference method for necessary analysis of computational fluid dynamics
- Simulated the behaviour of the flow pattern for a rigid body circular cylinder under steady flow condition using Star-CCM+

Supervisor: Qing Xiao, Reader; Wendi Liu, Research Associate

#### **PROFESSIONAL QUALIFICATIONS**

#### **Personal Skills:**

FEA analysis using Abaqus & ANSYS APDL; Programming language with 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**

Intel® Edge AI Scholarship, Intel
 Best Popular Prize, AI + Art in Robot Dancing Competition, PKU
 First Prize, Academic Competition in Mechanics Knowledge, JUST

2016 – 2017 National Scholarship, MOE

2015 Honourable Mention, Xuediao Structural Innovative Design Contest, JUST

#### PROFESSINOAL MEMBERSHIPS

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

## **EXTRA-CURRICULAR**

Aug. 2019 – Present	Maribot Vane 2.0 Design Project
	KTH & SMaRC (Swedish Maritime and Robotic Center), Stockholm, Sweden
	<ul> <li>Designed and built the next Maribot Vane, an autonomous sailing vessel</li> </ul>
Jul. 2019 – Aug. 2019	Summer campus student
	Peking University, Beijing, China
	• Applied deeplearning algorithm to achieve the motion capture activities and
	applied and 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:**

Kourosh Koushan Department of Marine Technology, NTNU
Professor kourosh.koushan@ntnu.no +47 41105297

Tahsin Tezdogan Department of NAOME, University of Strathclyde

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

ZHOU Hong Department of Naval Architecture and Ocean Engineering, JUST Professor +86 1365 6136 398

#### INTERESTS

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