TIANHOU WANG

Term address: Christ's College, St. Andrew's Street, Cambridge CB2 3BU **Phone:** +44(0)7762 926116

Term dates: 03/10/17 to 01/12/17, 16/01/18 to 16/03/18, 24/04/18 to 15/06/18

Email: tw463@eng.cam.ac.uk

EDUCATION	(official ac	adamic transcrip	t available on	request)
EDUCATION	опісіаі ас	ademic transcrib	t avallable of	(reduest)

Christ's College, University of Cambridge, M.Eng Engineering Tripos (4 Years)

PART 1B (SECOND YEAR): Expected 1st 10/17 - Now

PART 1A (FIRST YEAR): Top 1st of the class 10/16 - 6/17(779/900)

The University of Hong Kong, B.Eng Engineering degree (4 Years)

Uncompleted (On board HKU – Cambridge Engineering Joint Scheme)

FIRST YEAR: First Class Honour 09/15 - 06/16(GPA 4.11/4.3)

Harbin No.3 High School, P. R. C. 09/12 - 06/15(A Levels equivalent) (GCSEs equivalent)

09/08 - 06/12Harbin Fenghua Middle School, P. R. C.

AWARDS

07/17 Winifred Georgina Holgate Pollard Memorial Prize (for outstanding performance in Tripos)

10/16 Christ's College Undergraduate Scholarship Cambridge International Trust Scholarship 04/16

RELEVANT SKILLS

COMPUTING Good experience with SOLIDWORKS and AutoCAD, basic CREO.

Python (basic), C++ (basic), LaTeX (applicable), common office software.

Chinese (native, both simplified and traditional), with technical translation experience. LANGUAGE

English (higher education language, fluent in all aspects).

Experience in mechanical design, prototyping, fitting, assembly & testing. **INDUSTRY**

Working skills with centre lathe and turret milling machine.

Familiar with CNC plasma cutting, water jetting, wire & die EDM, etc.

COMMUNI-

Can produce editorial quality technical reports (sample on request) and neat drawings.

Good in delivering technical presentations. **CATION**

WORK EXPERIENCE

INTERNSHIP

Harbin Turbine Auxiliary Equipment Engineering Co., Ltd.

06/17 - 08/17

- Learnt the basic principles and techniques of pressure vessel design.
- Learnt the thermodynamic models and other empirical ways of heat exchanger design.
- Designed a feedwater heater for a 350MW steam turbine from contract requirements.
- Gained experience of working under established National Standards (GB).
- Produced satisfactory, approved technical report for the design

PROJECT HISTORY

2017

Design of a Chain Transmission Stress Rig: UNDERGRADUATE RESEARCH PROJECT

- Designed a test rig for the measurement of stress in chains with SOLIDWORKS.
- Produced technical drawings, and instructions for manufacture, fitting & assembly.
- Managed the purchase of all parts and material.
- Coordinated with the workshop to ensure on-time delivery.
- Assembled and tested the equipment, wrote the manual, ran induction sessions for operators.

Single Bicycle Carriage System for Bus

- Designed, from concept, a system to carry a single bicycle on a bus.
- Produced detailed mechanical design for the core components and technical drawings.
- Prototyped the core components in a machine shop for validation.
- Delivered a presentation to a group of 25, with the aid of posters.

Structural Design Project

- Designed, built and tested to destruction, a lightweight aluminium structure, with a teammate.
- Conducted finite element analysis to validate the joint design.
- Introduced improved procedures and quality control into fabrication and assembly.
- The final product carried 122% of the required destruction load (best in the group).

2016

'BravoGo' Rube Goldberg Machine Project: CHAMPION OF HKU EEE COURSE DESIGN

- Designed, built and tested a Rube Goldberg Machine from scratch, with a team of 5.
- In charge of structures and mechanism, involved in electronics.
- Led troubleshooting on a provided timer relay and convinced the lab that it was faulty.
- Won the champion of the design competition, got a prize of book coupons worth HKD500, product on display during University Open Day. (project video available on <u>YouTube</u>)

POSITIONS OF RESPONSIBILITY

Cambridge University Engineering Society

SECRETARY **Now**

- Maintain contact with industrial partners, cope with requests for presentations and publication.
- Manage the mailing list and send semi-weekly bulletins to 1200+ members.
- Maintain contact with members, serve as the first point of contact, handle queries & complaints.
- Take minutes at committee meetings and take care of other general operation.

Christ's College 2018 May Ball Committee

LOGISTICS

• Reach out to external contractors to supply marquees for the event at reasonable price.

OFFICER

• In charge of logistics management, delivery, and fire safety.

Now

• Make sure the event meets the noise & safety requirements of the City Council.

INTERESTS

FLYING AUTOMOBILE OTHERS Member of Cambridge University Gliding Club, experienced in flight simulation

Cambridge Full Blue Racing team member (powertrain)

Road cycling, blogging, photography, etc.

REFEREES: available on request