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# Yanhong Zhao

#### **Education**

2015-2019: Peterhouse, University of Cambridge

**MEng Engineering Tripos** 

Part IA (1st), Part IB (2.i): General Engineering

Part IIA(2.i), Part IIB(2.I): Information and Computer Engineering

2011-2015: Shenzhen College of International Education

A-level: Further Math A\* Math A\* Physics A\* Chemistry A\*

AS level: Economics A Psychology A, highest marks in the world for AS math (certified by CIE)

# **Work Experience**

# **Cambridge Development Initiative (Deputy Director)**

#### Dar es Salaam, Tanzania

July 2018 - September 2018

CDI is a student-led international charity that runs four community development projects in Dar es Salaam

- Planned an annual strategy focusing on sustainable funding, volunteer personal development and knowledge management
- Led the volunteer recruitment process to recruit 30+ volunteers from over 100 applicants
- Planned the summer trip logistics for the two organisations: Cambridge Development Initiative and Kite Dar es Salaam (30 UK volunteers and 40 Tanzanian Volunteers)
- Designed and delivered a volunteer training program for each project team (around 12 volunteers each, 8 sessions in total)
- Ran and mediated discussions to resolve conflicts between project teams and within project teams

# Wind Pioneers (Researcher/Software Engineer Intern)

Bangalore, India June 2018 - Present

A startup technical consultancy developing investment-ready wind farm sites in Southeast Asia

- Led a R&D project with the aim to predict the best wind farm sites in a given region
- Interviewed wind engineers and consultants and academics to research relevant model parameters
- Wrote python scripts to automatically generate terrain parameters to quantify potential wind farm sites
- This continues as Master's research project

# Flight Data Services (Data Specialist Intern)

#### Whiteley, UK

**July 2017 - September 2017** 

FDS uses advanced data analytics with machine learning to improve aviation safety for medium/small airline operators

- Automated the process of data validation re-engineering the data frames with no direct supervision with results as such that 2 hours of working are saved everyday
- Participated in a data science investigation for airplane over-braking exploring different machine learning techniques like kriging and regression trees that could be used to solve the problem.

# **Extracurricular Activities and Positions of Responsibility**

# Cambridge University Engineering Society (Events Director) Cambridge, UK

Mar 2018 - Present

- Leading the core teams of CUES, the largest and the most active student society in Cambridge with more than 1300 active members
- Working with 9 members in the events team to run company presentations and socials
- Heading up in-house projects and hosted conversations to improve the qualities and attendance of future events by applying data analytics on data collected by targeted surveys

# **Development i-Teams (Consultant)**

Cambridge, UK

Oct 2018 - Present

- Working with a group of academics (inventors) of engineering and social science background to conduct market suitability research for their product to solve medicine non-adherence problem.
- Consulting the healthcare tech start-ups companies, pharmaceutical companies and Public Health England on how the product should be prototyped and marketed.

#### StillGood Computer Vision Team (Team lead)

Cambridge, UK

Dec 2018 - Present

- Developing and interfacing computer vision function for an app that aims to advise recipes on leftover ingredients to combat food waste.
- Structuring the project and advising on data collection. Designing an ingredient identification model using transfer learning and implementing ingredient localisation using YOLO model

# **Machine Learning Experience**

**Fourth Year Modules -** Probabilistic Machine Learning (coursework on Gaussian Process, Probabilistic Ranking and Latent Dirichlet Allocation (LDA) model), Deep Learning, Computer Vision, Computational Neuroscience, Robotics and Software Engineering and Design

**Fourth Year Project on identifying optimal wind farm sites -** Visualising multiparameter data sets collected by the industrial partner and using Cambridge Advanced Modeller (Java) to build predictive data model to identify optimal locations for wind farm sites. Liaising with the software developer to deploy new machine learning modules.

Programming Language - Fluent in Python and Matlab and learning C++, Java and SQL.

**Online Courses -** Deep Learning for Computer Vision on Coursera, Machine Learning and Data Science courses on Udacity.

# **Additional Skills and Interests**

Language: Fluent in English and Mandarin; Learning Swahili and Spanish

**Sports:** Captain of Cambridge University Basketball Men's 2nd Team

**Expeditions**: Planned and undertook an expedition to trek along the Great Wall for three weeks. Planned and completed a four-day skateboarding trip around the Qinghai Lake (the largest lake in PRC) covering 400 km in distance **Other Interests:** Longboarding, snowboarding, solo-traveling and photographing