Chang Dou

Via Raffaele Lambruschini 4/B, 20156 Milano – Italy
Chang.dou@polimi.it | +39 3459304213

Professional Summary:

- Persistently enthusiastic about meeting new challenges.
- Rich experience of systematic learning and research in both automotive and logistics fields.
- Proven ability to combine theory with practice to conduct research and to complete work tasks across simulation and forecasting and planning fields.

Areas of research interest include:

* City logistics * E-cargo bikes * Drone delivery * Sustainable logistics

ACADEMIC BACKGROUND

CARDIFF UNIVERSITY | MSc. Logistics and Operations Management 2017 - 2019

- **Classification of degrees:** Merit (67.3/100, overall 180 credits)
- **Dissertation:** Crowdsourced Logistics for Last Mile Deliveries (73, 60 credits)
- **Core courses:** Logistics Modelling (69, 30 credits), Operations Analytics (68, 30 credits), Strategic Supply Chain Management (63, 30 credits), Operations Management (55, 30 credits), etc.

XIHUA UNIVERSITY | M.Eng. Automotive Engineering 2015 - 2019

- **Average score of degree courses:** 83.9/100
- **Dissertation:** Research of Ramp Gearshift Schedule for Electric Vehicles Considering Drivetrain Efficiency
- **Core courses:** Automobile Control Theory (89), Optimal Control and Application (84), Measuring Technology and Signal Analysis for Automobiles (84), Theory and Control Technology of Automobile AT (80), etc.

HEBEI UNIVERSITY OF TECHNOLOGY | B.Eng. Automotive Engineering 2011 - 2015

- **GPA:** 2.89/4.00
- **Dissertation:** Design and Simulation of Steering System of Vehicles
- **Core courses:** Vehicle Structure (96), Engine Principle (86), Automobile Vibration and Noise Control (92), Automobile Safety Technology (87), Advanced Mathematics (94), etc.

PUBLICATIONS

Chen Yan, Guangwen Zheng, Abu Bakkar Siddik, Qian Li Dong, **Chang Dou** (2021). Factors Affecting the Consumers Online Shopping During the COVID-19 Pandemic in China. Revista Argentina de Clínica Psicológica, Vol. 30(1), 853-864, DOI: 10.24205/03276716.2020.2081

Xiaofeng Yin, Yiming Liang, Kexu Chen, **Chang Dou**, Kepu Yang (2020.04.14). Construction Method and Application of Urban Ramp Driving Cycle. (Invention Patent CN 111008505 A)

Yi-ming LIANG, Xiao-feng YIN*, **Chang DOU**, Yang LIU (2019). Application of SOM Neural Network in the Construction of Urban Ramp Driving Cycle. 2019 International Conference on Artificial Intelligence and Computing Science (ICAICS 2019)

Chang Dou, Irina Harries, Ahmed Mohammed (2021). Integrating Crowdsourced Logistics with Existing Practices to Address Last-mile Delivery Challenges on University Campus in China. The 25th International Symposium on Logistics (Under reviewed)

RESEARCH EXPERIENCE

Automatic Transmission Efficiency Bench Experiment March 2019 - June 2019

- Finishing the installation, calibration and daily maintenance of bench equipment
- Designing and assessing the project of experiment, conducting the experiment for 600 hours
- Processing collected data with Python, building transmission efficiency model at different gears and different temperatures

Building Urban Ramp Driving Cycles in Chongqing city China March 2017 - July 2017

- Designing the project of date collection, installing sensors on vehicles to collect real-time data including

vehicle dynamics parameters, road conditions, driver behaviours, etc.

- Driving vehicles to collect real-time data with the total mileage of 3500km
- Finishing the construction of urban ramp driving cycle and conducting simulation in Matlab/ Simulink.

PRACTICAL PROJECT EXPERIENCE

Nando's, **Western London, UK** December 2017 - January 2018

Committed to optimize logistics cost by establishing a new logistic dispatching route model.

Key contributions:

- Defining the project requirements with group members and obtain the data required for model building, such as store locations, monthly average demand, operation costs, cold chain transportation costs, etc.
- Reporting to project supervisor to update project schedule and improve project plan, completing model building and simulation within the specified time frame.
- The optimal equipment integration nodes and the optimal route of distribution between each node and the supplier were solved, and the influence of various factors on the total cost were analysed.
- Finally, 2.7% cost saving was achieved.

National Health Service (NHS), Wales, UK March 2018 - May 2018

Committed to reallocate personnel resource so as to improve operational efficiency and shorten patients' waiting time by conducting sampling survey and forecasting techniques.

Key contributions:

- Applying for ethical permission and conducting sampling survey among medical staff and analysising the results for further improvement.
- Proposing appropriated forecasting method after comparing the accuracy of each method and then using the optimal forecasting method with R software to predict the number of patients attending in the A&E department for minor injuries in the following week.
- The waiting time of patients in the surveyed hospitals was shortened by 24.3%

WORKING EXPERIENCE

Volkswagen-FAW, Chengdu, China August 2019 – October 2020

Sales planning assistant manager

Being responsible for monitor the daily production, sales and inventory status; According to the current resource satisfaction rate and future demand forecast, guide factory ordering production weekly, determine the production plan; Ensure the resource satisfaction rate, reduce the inventory cost, and support the completion of the sales target.

Key contributions:

- Optimizing the existing demand forecasting methods and forecast the N+4-week order quantity, comprehensively improving the prediction accuracy by 3%, effectively alleviateing the supply-demand difference with higher stock turnover rate and finally improve the resource satisfaction rate by 15%.

RELEVANT SKILLS, AWARDS & HOBBIES

- **Key Skills:** Matlab/Simulink (for simulation), Python (for computing), R (for forecasting), Critical literature review, qualitative / quantitative analysis
- **Languages Skills:** Proficient English (IELTS 7, GRE 308), Proficient Chinese (Mother tongue), Beginner level in German (A1 85)
- **Other Skills:** Auto CAD (for 2D modelling), Unigraphics NX (for 3D modelling), RACELOGIC VBOX Tools (for data collection), skilled driver (acquired both UK and Chinese driving licenses)
- **Awards:** National Scholarship (CSC 2021-2025), Third Prize Scholarship (2014, 2015)
- **Interests:** Bass, drone photography, video editing, music production, etc.