



**NANYANG  
TECHNOLOGICAL  
UNIVERSITY**  
SINGAPORE



**Wu Chong**

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### Interest positions

- ★ Data Engineer
- ★ Machine Learning Engineer (PyTorch and Hadoop)
- ★ Spark Engineer
- ★ Bigdata Engineer (Hadoop)

### Education Background

- ★ **2018.08-2022.03 Nanyang Technological University Computational Fluid Dynamics**  
**Ph.D. candidate** (passed qualifying examination and achieved candidate but **quit** myself after that)  
GPA:3.58/5
- ★ **2015.09-2018.06 Beihang University Computational Fluid Dynamics M.E.**  
Rank of average score:60~90/210 GPA:3.24/4
- ★ **2010.09-2014.06 Nanchang Hangkong University Flight Vehicle Propulsion Engineering B.E.**  
Rank of average score: 6/70 GPA:3.324/4

### Internet Project Experience

- ★ 2022.07-2022.07 Build Hadoop Ecosystem Cluster with **Docker**  
(Wrote a Dockerfile to wrap Hadoop components, which can be used to construct the recommender system; Docker found by searching Dockerhub ID: didadidaboom; and docker file found at GitHub: [didadidaboom \(CHONG\) · GitHub](https://github.com/didadidaboom))
- ★ 2022.03-2022.06 Learnt **neural networks** theory systematically and practiced it by **PyTorch**  
(Lead all the processes from **data collection, cleaning, and pre-processing, to training models**, including Multilayer DNN, TrialNet, and Gan; Followed a paper and wrote its corresponding algorithm. Found here <https://github.com/didadidaboom/NeuralNetwork-Practices> )
- ★ 2022.02-2022.03 Repeated an open project - “Recommend System: 黑马头条”  
(Practiced **Hadoop ecosystem** and its components, including **Hadoop, Hive, Yarn, Sqoop, and Spark**; Learned how the recommender algorithms developed from item-based and user-based recommendation to model-based recommendation. Lead all the processes from **Flume, HDFS, Spark-SQL, Spark-ML, and Redis, to Recommender.**)
- ★ 2021.12-2022.02 Started a Mini-program project “BKMIST”, which is a social community and was published on the top of previous Mini-program “圈子”  
(The whole project was finished by myself, including concept design, database design, UI design, frontend (JavaScript) development, backend (python, Django Rest framework) development, and cloud server deployment; Project found at <https://github.com/didadidaboom/bkmist> and <https://github.com/didadidaboom/bkmist-frontend> )
- ★ 2020.05-2020.12 Organization of the development of a social App “圈子”  
(Including concept design, the product requirement written, and recruitment of members)
- ★ 2017.05-2017.10 Organization of the development of the auxiliary software for a trading platform  
(Including fundraising(in private), product requirement, recruitment of members, and organization of the developers)

## Courses related to internet

- ★ Special Advanced Topic: Digital Image Processing (including the algorithms of facial recognition and picture synthesis)
- ★ Artificial Intelligence in Game Design (including the algorithms of machine learning, such as supervised learning, unsupervised learning, and reinforcement learning)

## Research Experience

- ★ **2021.03-2021.10 Incorporated the LBFS and GKFS methods into the OpenFOAM (open source; C++)** (*success but the turbulent is still not verified*)
  - Parallel, 2D and 3D methods.
- ★ **2020.07-2021.03 Development of Fortran packages for the LBFS and GKFS method** (*success*)
  - Both the LBFS and GKFS shared a same mesh package, which compacted files. The whole packages included 7-10 files. Do not support parallel running.
- ★ **2019.07-2020.07 Incorporated the combustion-support Lattice Boltzmann method into the open source, Palabos (C++)** (*failed*)
- ★ **2018.07-2019.07 Incorporated the Flamelet model into the open source, Cantera (C++), and wrapped them in Python package** (*success*)
  - Cantera part can be found in <https://github.com/CHONGN/cantera>.

## Programing Skills & Softwares

- ★ English level: Overall Band Score 6.5 in IELTS and CET-6
- ★ Computer level: Grade two C programming language, Python(skilled), C++, fortran (skilled)  
Java(understand), JavaScript
- ★ Professional skills: OpenFOAM, Palabos, ANSYS, CAD, Unity(familiar)  
Django(skilled), PyTorch, Hadoop, Spark, SQL(skilled)

## social accounts

- ★ Github: didadidaboom
- ★ Dockerhub: didadidaboom
- ★ Personal academic page: <https://didadidaboom.github.io/academicpages>
- ★ Personal blog: <https://didadidaboom.github.io>

## Awards & Practices

2018-2022	Nanyang Technological University, Research scholarship	
2015-2018	Second-class scholarship of Beihang University (3 times)	School-level
2010-2011	Merit student of Nanchang Hangkong University	School-level
2010-2014	First, Second, Third and Second-class scholarship of Nanchang Hangkong University respectively	School-level
	The 9th Zhou Peiyuan Mechanics Competition for College students	Province-level
201106	Excellent Student Cadre of School of Aircraft Engineering	School-level

## Academic Achievements

[1]. Wu C, Chan W L. Simulation of Scalar Transport in a Non-Reacting Turbulent Jet using the Lattice Boltzmann Method[C]//APS Division of Fluid Dynamics Meeting Abstracts. 2019: P41. 004.

