



**NANYANG
TECHNOLOGICAL
UNIVERSITY**
SINGAPORE



Wu Chong

715 JURONG WEST ST 71 #05-45 SINGAPORE(640715); Master of Engineering; Tel: +65-96139530; Email: chong.wu.sg@outlook.com

Interest positions

- ★ Data Engineer
- ★ Machine Learning Engineer (PyTorch and Hadoop)
- ★ Spark Engineer
- ★ Big Data 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/CHONG))
- ★ 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 - “Recommendation System: 黑马头条”
(Practiced **Hadoop ecosystem** and its components, including **Hadoop, Hive, Yarn, Sqoop, and Spark**; Learned how the recommendation algorithm developed from item-based CF (Collaborative Filtering) and user-based CF to model-based CF. Lead all the processes from **Flume, HDFS, Spark-SQL, Spark-ML, and Redis, to recommendation system.**)
- ★ 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: invite and organize all members; join in designing the project conceptually; support our team technically wherever they need in either the backend or frontend)
- ★ 2017.05-2017.10 Organization of the development of a SAAS-like platform for others' businesses.

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, JavaScript
- ★ Professional skills:
Django(skilled), PyTorch, Hadoop, Spark, SQL(skilled), SpringBoot

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.