# Tongyu Ding

### RESEARCH INTERESTS

• Data Science

• Machine Learning

• Database

#### **EDUCATION**

# Nanjing University of Posts and Telecommunications

Bachelor of Science - Computer Science; GPA:  $3.79 \setminus 5.0$ A joint program with New York Institute of Technology Nanjing, China Sept. 2014 - June 2018

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## WORK EXPERIENCE

## NANJING CATINFO INFORMATION TECH

Nanjing

Product Manager (Board Member)

August 2018 - April 2022

o Data Management Software Development: KCLOUD: Enterprise Database Lifecycle Management System

CATDB: PostgreSQL-Based MPP Database KTUNER: Query Optimisation Analysis Tool KSYSTEM:Oracle-based Cluster Management System

• Project Management for more than 50 projects in data mining and data visualization: Responsible for software development and data analysis collected from different sensors

#### Projects

#### • KCLOUD:

- o Completed the architecture design and function development using Shell, Python, Perl, SQL, Java and Machine Learning
- Supported the monitoring of data centers and developed a decision-support system for computing and network resource management including workload prediction by Gaussian Process Regression
- Developed a risk(alert) management and resilience system based on supervised learning to ensure high-availability (sustainability)

#### • CATDB:

- o Developed and optimized a distributed data management system for structural data in large scale
- Took the leading role in the development of decision-support systems using collecting data from different kinds of sensors, such as bridge or road sensors, to monitor and ensure their sustainability based on CATDB

#### Honors and Awards

- Oracle Database 12c Administrator Certified Professional September 2020
- $\bullet$ First Class Scholarship, NUPT 2018–2019
- 2nd Prize, Mathematical Contest in Modelling (MCM) January 2017
- President Scholarship, NYIT 2015-2018(each year)
- Dean's Scholarship, NYIT 2015-2017(each year)

#### ACADEMIC EXPERIENCE

# Urban Restaurant Recommendation System

Product Manager

January 2018 - June 2018

- $\circ \ \ Completed \ software \ requirement \ analysis, \ algorithm \ design \ and \ optimization, \ and \ coding \ on \ Android \ Platform$
- Developed a new scoring options judging part of scores from comments using text classification and updated a weighed score model combined with recommendation algorithms using more than one million records

## Satellite Image Supervised Classification

Product Manager

September 2016 - June 2017

- Explored the satellite image differences by comparing the minimum distance classification and maximum likelihood classification using machine learning and computer graphics
- Realized the comparison and optimization of the algorithm using 40000 images

## SKILLS

• Languages: C++, SQL, Shell, Python, Java

• Platforms: Oracle, PostgreSQL, MySQL, SQL Server, Spark

• **IELTS**: Overall:7.0