

# Hao Wang

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Linkedin

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## Skill

- Language: Java, Python, C++
- Framework: Spring Boot, Spring, Mybatis, Spark
- Additional: TensorFlow, PyTorch



## Work Experience

- **April 2018 to November 2021:** Tencent Technology (Shenzhen) Co., Ltd.
  - Designed and implemented a short video labeling system based on title and vision for Tencent-Search engine.
  - Built Https APIs based on **Spring Boot** as the interfaces of AI models and served these to clients.
  - Got a Good+ (top 20% in the department) review in first half of 2021.
- **November 2021 to December 2023:** Charworkshop Technology (Shenzhen) Co., Ltd.
  - Designed and developed a pet community website based on Spring Boot, including login module, role management module and article management module.
  - Built a service health-check application to check and notify system services status.
  - Developed a crawler which is based on Scrapy to collect data from website.



## Project

- **Pet Community Website**
  - **Background**

Designed and implemented the backend system for pet community website to share and get information of pets.
  - **Pet Article RestFul APIs**

Firstly developed RESTful API for user data interaction service. In addition, developed role-based access control module for articles management. Both are based on Spring Boot. Used Mysql as the data stores. Used Redis as the key-value database.
  - **Article Crawl System**

By using Scrapy, I built out a crawl system for downloading pet related articles from several websites. And the system checks new articles from these websites everyday.
- **Video Labeling System**
  - **Background**

Designed and implemented the system of Labeling short videos for Tencent-Search engine and these labels be applied in several results pages.
  - **Extracted labels from title**

Trained sequence labeling models based on **Prompt tuning + Bert** to generate videos' labels and achieved a 83.24% AVG-F1 Score. Then deployed it as a Http Service.

- **Implemented the Program**

Built the video data process system in Tencent **spark** data platform and the videos' labels be finally written into the key-value databases for downstream applications. This system processed ten thousand levels of video data every hour. The video labels increased the click rate by 15.3% (from 21.84% to 25.19%) in the video results page. The video labels supported the phrase-filtering and video-collecting functions.

- **AI Services**

- **Background**

Built several identity documents OCR http api for Hong Kong Fusion Bank. And built HTTPs APIs that served applications of AI to clients.

- **OCR Implement**

Built a pipeline to recognize different documents' texts. Trained models to tell types, find text regions and recognize words intelligently and integrated these models into the pipeline.

- **AI HTTPs Services**

Built HTTPs services of several AI models (trained in Keras, TensorFlow and PyTorch) in finance and insurance fields. Based on Spring Boot to develop the HTTPs api and use good frameworks to support datasource connecting and persistence, logging and so on.



## Education

- **Master of Engineer (Professional Degree) : Computer Technology**

Shanghai Jiaotong University, in China, from September 2015 to April 2018

- **Bachelor of Engineer : Software Engineering**

Xi'an Jiao Tong University, in China, from September 2011 to July 2015



## Paper

- **Hao Wang**, Hai Zhao. A Transition-based System for Universal Dependency Parsing. In Proceedings of the CoNLL 2017 Shared Task: Multilingual Parsing from Raw Text to Universal Dependencies Vancouver, Canada, August 3-4, 2017. **(CoNLL 2017)**