Xu Zhusheng

👋 A passionate **software engineer** having **18 years experiences** of building applications with `Python` , `Java` , `JavaScript` .

🤙 Contact

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🥷 Skills

- **Languages:** *`Python`* , *`Java`* , *`JavaScript`*
- **Machine Learning:** *`NumPy`* , *`Pandas`* , *`PyTorch`* , *`Scikit learn`* , *`Matplotlib`*
- **Backend:** *`FastAPI`* , *`Spring Boot`* , *`Spring Cloud`*
- **Frontend:** `ReactJs` , *`Vue`* , *`Three.js`* , *`Playwright`*
- **Infra-Architecture:** *`Redis`* , *`MySql`* , *`PostgreSQL`* , *`MongoDB`* , *`RabbitMQ`* , *`Celery`* , *`Nginx`* , *`Docker`* , *`ClickHouse`*

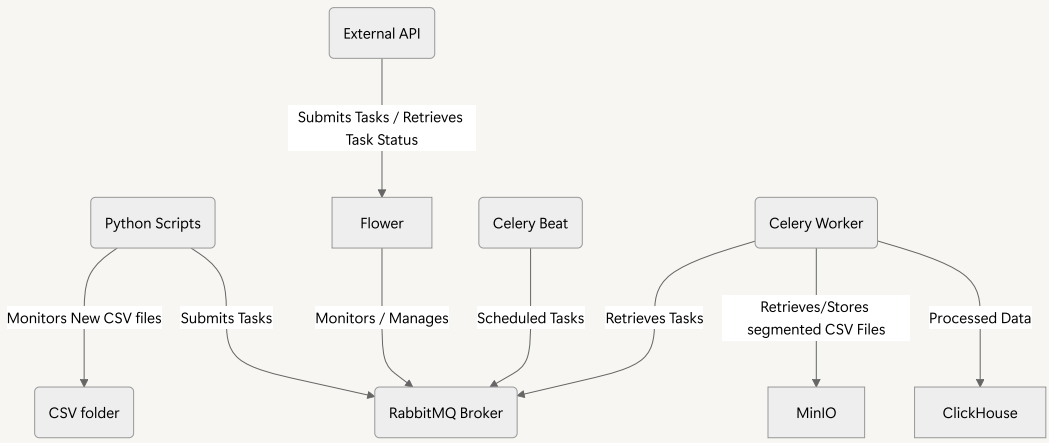
🎯 Projects

Flying Training Metrics Calculation System - *(November 2024 - Present)*

🏷️ `Python` , `MinIO` , `RabbitMQ` , `MySQL` , `ClickHouse` , `Celery` , `Docker`

Objective: Calculates flying training metrics for hundreds of thousands flying simulation records in CSV format(like black box recordings, 40MB around per file)

Designed and implemented a distributed flying training metrices calculation system using `Celery` to fulfill the objective. The architecture as below:



BIM Lightweight Platform - *(July 2019 - March 2023)*

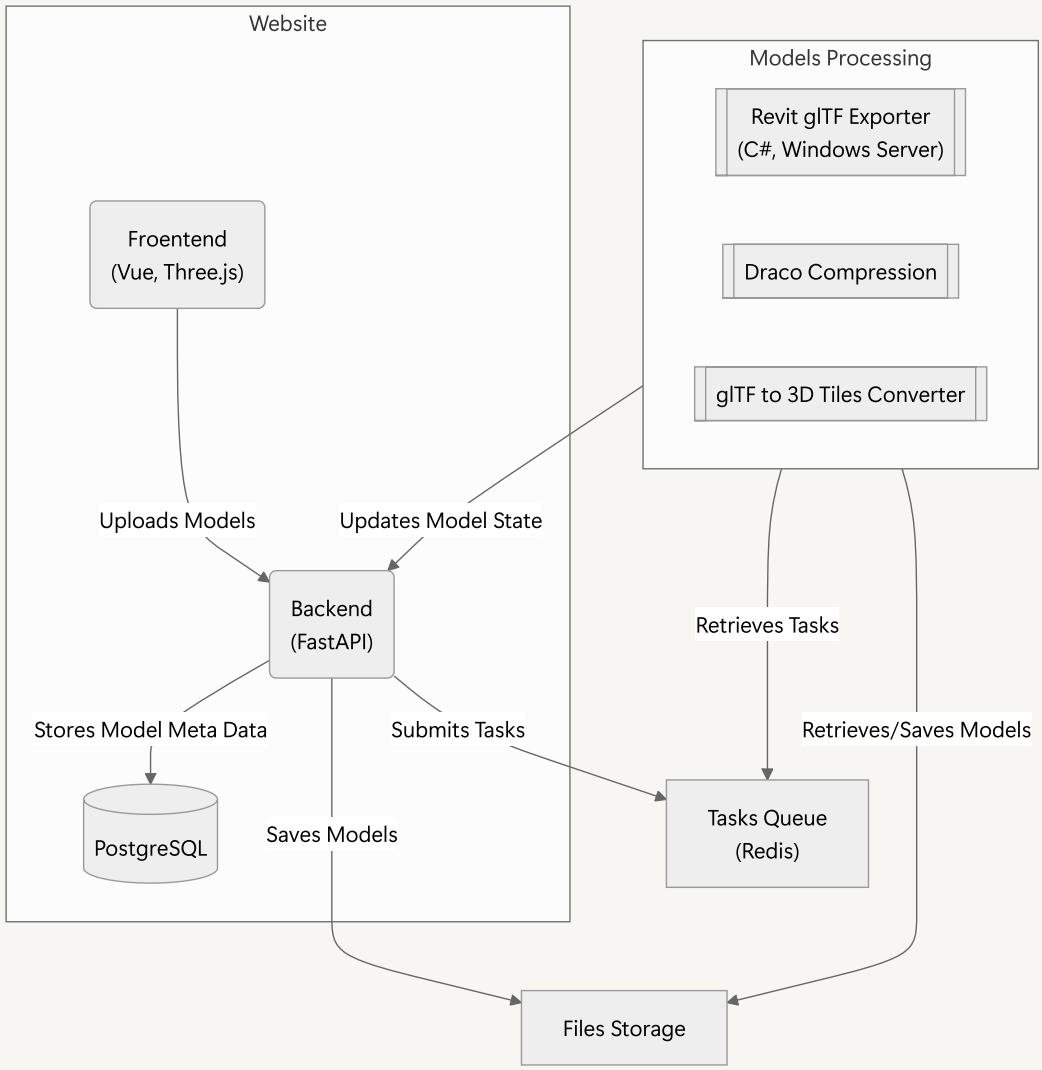
🏷️ `C#` , `Python` , `FastAPI` , `JavaScript` , `Vue` , `Three.js` , `Redis` , `glTF` , `3D Tiles` , `Docker`

Objective: Reuse BIM models (built by Revit) in variant scenarios - web, AR/VR.

Built following applications :

1. *Exports RVT models to glTF models -* `C#`
2. *Compresses glTF with Draco -* `C++, Draco`
3. *Converts glTF models to 3D tiles models -* `Python`
4. *Web API for viewing glTF and 3D tiles models -* `Javascript, Three.js`
5. *Website for uploading RVT models and viewing glTF models -* `Vue, FastAPI, PostgreSQL`
6. *Connects above applications 1 - 5 with REST API and message queue -* `Python, Redis`

The overall structure and processing flow as below:



Chronos - *(January 2019 - June 2019)*

🏷️ `Java`, `Spring Cloud`, `Docker`

Objective: Build a time management app for multi-platform and high concurrency.

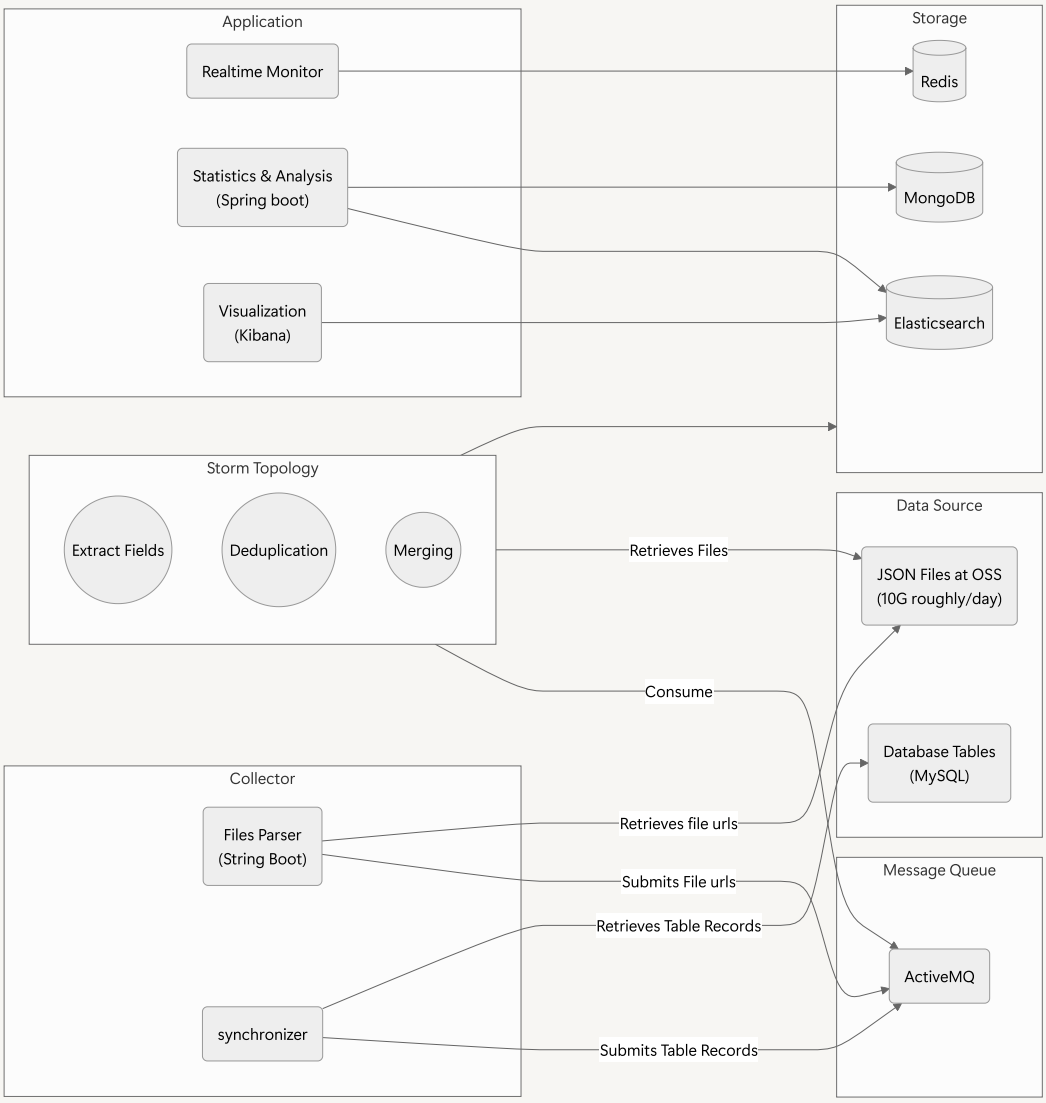
Implemented a microservices system architecture.

Data Cleaning Pipeline - *(April 2017 - June 2019)*

🏷️ `Java` , `Docker` , `Elasticsearch` , `MySQL` , `MongoDB` , `Redis` , `Storm` , `ActiveMQ`

Objective: Cleaning data from variant data sources with different formats.

Built a data cleaning pipeline as below:



💼 Work Experiences

Kingpoint Data Technology Co.,Ltd. - *(November 2024 - Present)*

Architect

- *Designed and implemented a distributed flying training metrices calculation system using* `Celery`.

Shengjie Transportation Technology - *(July 2019 - March 2023)*

Technical Director

- *Delivered a BIM (Building Information Modeling) model lightweight platform.*
- *Delivered 3D/VR applications and company websites.*

Doron Information Technology - (April 2017 - June 2019)

Architect

- *Delivered a data cleaning pipeline with Storm.*
- *Built the app "Chronos" with microservices architecture.*

Psychology 001 - *(April 2015 - March 2017)*

Architect

- *Refactored the existing platform with microservices.*
- *Built a full-text search system.*

🌐 Languages

- **Chinese** 🇨🇳 - *Native speaker*

🎓 Education

Guangdong Polytechnic Normal University - *(2001.09 - 2005.07)*

Bachelor's Degree in Computer Science and Technology