Pu Chen

Software Engineer

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📍 Taipei, Taiwan

Summary

5+ years experience in software development. Skilled in Python, Javascript, Software Development, Machine Learning, Software Testing and Debugging. Experienced in rapid prototyping using open-source software. Familiar with Cloud Application Development. Enjoy solving problems by coding.

Experience

Senior Software Engineer | XRSPACE

July 2023 - Present

- Led a cross-functional team of 4 engineers to architect, develop, and maintain scalable data pipelines and Retrieval-Augmented Generation (RAG) applications.
- Designed and implemented automated CI/CD workflows for data and AI pipelines using GitHub Actions, Terraform, and AWS SageMaker, reducing deployment time by 60% and improving system reliability.
- Integrated Large Language Models (LLMs) with GitHub/Jira APIs and developed Chrome extensions to automate product release workflows, accelerating development cycles by 40%.
- Orchestrated cloud-native application deployments on Kubernetes using Helm and ArgoCD; architected and deployed MLflow service on GCP with Pulumi for ML lifecycle management.
- Built and optimized a real-time audio-to-facial blendshape model using PyTorch and ONNX, achieving 30% performance improvement while reducing computational costs.
- Cultivated a high-performance engineering culture focused on innovation, collaboration, and continuous improvement.

Software Engineer | Deep Sentinel

February 2023 - July 2023

- Developed an object detection model evaluation tool to improve ML workflow efficiency.
- Resolved database performance issues and enhanced overall system stability.
- Built and integrated automated testing environments into CI pipelines, raising code quality.

Software Engineer | GoFreight

May 2022 - November 2022

- Developed and maintained scalable web crawlers using Scrapy.
- Built data accuracy dashboards to monitor and ensure data quality.
- Implemented system observability with Prometheus and Grafana for proxy and crawler stability.

Software Engineer & Data Scientist | Changing.AI

May 2019 - March 2022

- Enhanced e-commerce recommendation system, boosting click-through and conversion rates by ~200%.
- Optimized search engine, reducing errors by over 40%.
- Developed and maintained data collection tools with ReactJS and MongoDB.

Machine Learning Engineer Intern | Changing.AI

July 2018 - December 2018

- Built recommendation systems with Python and TensorFlow.
- Developed ML training pipelines using Airflow.
- Visualized model performance with Google Data Studio.

Education

Master, Computer Science | National Central University

2016 - 2018

Bachelor, Computer Science | Yuan Ze University

2012 - 2016

Skills

General

- Data Engineering
- Machine Learning
- Large Language Models
- Web Application Development
- Backend Development

Languages

- Python
- Javascript
- SQL
- Golang

Frameworks

FastAPI • PydanticAI • React • TensorFlow • Pytorch • Scrapy • Terraform • Pulumi

Software

git • Docker • Airbytes • AirFlow • Dagster • DBT • Kubernetes • Looker Studio • Google Cloud Platform • Amazon Web Services • Grafana • Prometheus • Google Analytics • Firebase

Databases

BigQuery • Mongodb • ElasticSearch • PostgresSQL • MySQL

Projects

E-commerce Recommendation System | Changing.AI

We built a recommendation system for one of the top 3 e-commerce websites in Taiwan. The system uses Fluentd and ElasticSearch to collect real time log of user behavior. The data will be extracted, transformed and trained the Deep Learning recommendation engine automatically using Airflow. In order to deal with the massive loading of e-commerce websites, we use Kubernetes and Docker to deploy and auto-scale the server. Our system has increased the click-through rate and conversion rate by about 200%.

E-commerce Search Engine | Changing.AI

We built an e-commerce search engine using ElasticSearch and Bert Deep Learning model. Our Engine reduces errors by more than 40%.

ChatGPT Chrome Extension | Personal side project

GitHub

This is a Google Chrome extension that provides a quick and easy way to check the grammar of text on websites. Users can also define their own prompts in the options page to let the extension do other tasks, such as code review or creating an abstract for the article.

Publications

Differentiating Regularization Weights – a Simple Mechanism to Alleviate Cold Start in Recommender Systems
TKDD ACM Transactions on Knowledge Discovery from Data 13(1), 2019

Contact

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