

Tim Liao 廖廷儀

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LinkedIn: [linkedin.com/in/tingliao](https://www.linkedin.com/in/tingliao) **GitHub:** github.com/tim-liao

- Familiar with utilizing AWS services and tools for website development, API implementation, and problem-solving.
- Enthusiastic about conducting various experiments and combinations using limited resources.
- Open to diverse opportunities in the Back-end field, applying expertise and skills.

SKILLS

Programming Language

- JavaScript

Back-End Environment and Framework

- Linux
- Node.js
- Express
- Docker
- Nginx

Database

- MySQL
- Redis

Cloud Service (AWS)

- EC2
- S3
- RDS
- ElastiCache
- CloudWatch
- SES
- SNS
- Elastic Load Balancing
- Auto Scaling

Others

- MVC
- RESTful API
- Unit Test
- Stress Test
- Swagger
- RabbitMQ

Version Control

- Git / GitHub

PROJECTS

Simple Send side-project2023.online github.com/tim-liao/simplesend

Email sending service enables you to send, track and analyze friendly.

- Highlighted Features: Email sending, email open tracking, link tracking within emails, data analysis.
- Queue: Utilized Docker to deploy RabbitMQ and delegate user's email sending requests to workers for processing.
- Simple Email Sending: Users can easily send emails on the Back-end using my dedicated NPM package (npmjs.com/package/simplesend).
- Email Data Analysis: Subscribed to the SNS topic through a specified HTTPS endpoint to record SES sending information.
- User Authentication for Sending: Authenticated DNS settings using the built-in DNS module of Node.js.
- Instant High Traffic Requests: Implemented Elastic Load Balancing and Auto Scaling to enable the website to handle a high volume of real-time requests at a rate of 200 requests per second.
- Monitoring: Managed SES sending status by SNS and Lambda to store results in CloudWatch Logs for auditing.

STYLISH

Developed a comprehensive e-commerce website with features such as general registration and login, OAuth login, and payment functionalities.

- Reduced SQL Requests: Utilized Redis as a cache for temporary storage of campaign data.
- DDoS Prevention: Implemented rate limiting with Redis.
- Access control: Implemented Role-Based Access Control (RBAC) to differentiate between administrators and regular users, and granted permissions using MySQL.
- Queue: Utilized Redis as a queue for workers to send order confirmation emails to users.
- Autocomplete and Fuzzy Search: Leveraged Elasticsearch to enable users to search for similar products and provide them with relevant suggestions during the retrieval process.

Telebot github.com/tim-liao/telebot

Integrated a Telegram Chatbot with government open APIs for queries and scheduled push notifications.

- Clean Environment: Dockerized environment for hosting the chat bot.
- Scheduled Notifications: Stored individual user data and pushed scheduled notifications in MySQL.

WORK EXPERIENCES

AppWorks School

Back-End Engineer

Jan. 2023 - Jun.2023

- Engaged in extensive hands-on development and actively participated in project discussions to cultivate a strong engineering mindset and enhance problem-solving abilities.
- Collaborated closely with Front-End Engineers, gaining valuable insights into the significance of effective communication, seamless coordination, and efficient version control.
- Dedicated five weeks to the independent development of a large-scale creative application, "Simple Send," demonstrating exceptional skills in debugging and optimizing.
- Explored diverse topics through project discussions, including cluster management, sentinel and master-slave patterns, and database normalization.
- Developed a fully-featured e-commerce website from scratch, demonstrating problem-solving and self-learning abilities.

Taiwan Power Company

Civil Engineer

Apr. 2020 - Jan. 2022

- Reviewed construction drawings, monitored project progress, and prepared annual budgets.
- Ensured quality control of on-site construction activities.
- Conducted site surveys, filled out reports, and drafted official documents.
- Managed project contracting activities.

E-commerce Business Owner

Sep. 2017 - Jan. 2023

- Researching trends in the art toy market, exploring its ever-evolving landscape and consumer preferences.
- Exploring and discovering art toy products that hold promise and possess unique attributes, assessing their potential and market appeal.
- Developed communication and coordination skills through interacting with international art toy designers and manpower coordinating.

GUO SING Structural Engineers Firm (國興結構技師事務所)

Civil Engineering Intern

Jul. 2017 - Aug. 2017

- Ensured quality control of on-site construction activities.
- Coordinated the submission of engineering construction materials for inspection.
- Conducted site surveys, filled out reports, and handled official document correspondence.

EDUCATION

National Taiwan Ocean University

B.S. in Harbor and River Engineering

Sep. 2014 - Jun. 2018