Hsuan-Yang (Bryan) Huang

Mobile: 571-516-4944 . Email: ckscks038038@gmail.com . Linkedin: https://www.linkedin.com/in/hsuan-yang-huang/

EDUCATION

Virginia Tech   **Grad Date**: May, 2025
Master of Engineering in Computer Science

National Chiao Tung University   2016 - 2022
Bachelor of Science in Industrial Engineering and Management, CS GPA:3.8

SKILLS

- Golang, Python, JavaScript/TypeScript, C++, Java, SQL, protobuf
- MySQL, PostgreSQL, Redis, Elasticsearch
- Flask, Django, Node.js, Express, React, Spring Boot, Junit, JSP
- Docker, Kubernetes, Jenkins, Jira, Slack
- AWS(EC2, S3, RDS, ELB, Lambda, ElastiCache, CodePipeline), BigQuery, Datastore, Datadog, Terraform

INDUSTRY EXPERIENCE

Moloco   *Seattle, Washington, United States*
Software Engineer Intern   *May. 2024 - Aug. 2024*

- Implemented a targeted trace logging system in Golang (gRPC) that schedules log tracing requests using Datastore, enabling better observation of incoming bid requests and improving the real-time bidding process with SSPs.
- Implemented real-time data streaming logic to handle millions of QPS with BigQuery table in large-scale distributed systems. Integrated Datadog to monitor system performance, enabling efficient querying and analysis of bid request logs.
- Designed replacement algorithm for configurations, coordinating with an event-driven API for seamless integration and execution.

TAELOR   *(Remote) Hayward, California, United States*
FullStack Software Engineer Intern   *Jun. 2023 - Aug. 2023*

- Developed an instant data-monitoring dashboard using React and RESTful APIs, enabling stylists to concurrently monitor the performance of over 50 subordinates.
- Building high-performance RESTful APIs for an operational dashboard, integrating a MySQL relational database and Django. Utilizing pagination and query optimization to achieve a remarkable increase in performance.

THINGNARIO   *Taiwan*
Back-End / Big Data System Engineer   *Jan. 2023 - Aug. 2023*

- Optimized IoT sensor data collection, achieving 50% faster data retrieval using Flask and remote command line tools. Efficiently managed solar data from 1,000+ sites on GCP, enhancing system performance and reliability.
- Enhanced a Python-based, real-time data processing system for IoT sensor integration, mastering sensor-specific documentation to facilitate versatile raw data handling and boosting system efficiency.
- Optimized IoT sensor data automation in solar power plants using Modbus RTU. Utilized Pytest for validating meter device data accuracy, contributing to a 25% reduction in operational time through enhanced data integrity and processing efficiency.

AppWorks   *Taiwan*
Back-End Developer Intern   *Sep. 2022 - Jan. 2023*

- Designed and deployed a scalable short URL generation system on AWS, utilizing services such as EC2, RDS, Elastic Load Balancing, and ElastiCache. Implemented a master-slave database architecture for load distribution, and employed a Key Generation Service (KGS) for unique URL creation, significantly accelerating backend processing speed.
- Led backend development in an e-commerce project using Node.js for RESTful API implementation. Designed database schema and optimized API response times using Redis as an in-memory caching layer.

PROJECTS

Cruddur — A micro-blogging platform on AWS   *Nov. 2023 - Present*

- Containerizing front-end (React) and back-end (Flask) for scalable deployment on AWS EC2 and ECS.
- Implementing a serverless AWS Lambda function for automated image processing, triggered by new image uploads to an S3 bucket, with processed images stored back in the bucket.
- Constructing a CI/CD pipeline using AWS CodePipeline, integrating CodeBuild and CodeDeploy to automate deployment processes, triggered by updates in the GitHub repository.

Yoyomantype — An interative typing practice website [link]   *Nov. 2022*

- Boosted user typing accuracy by creating a word recommendation system on an Elasticsearch server hosted on EC2. Utilized fuzzy search and N-gram tokenizer queries to generate recommendations based on user input.
- Managed multiplayer rooms state with Socket.IO and Node.js for instant interaction.