

Employment

Software Engineer Voice Bot (Python)	Telepress	Sep 2018 – Present
<ul style="list-style-type: none">Voice Bot is a real time streaming low latency bi-directional system which integrates the PBX telephony system and text-based chatbot service.Lead backend developer responsible for system design, database design, implementing server and telephony system clients, and organizing three other engineers for internal tools development and QA testing.Voice Bot is powered by asynchronous Socket.IO framework to stream audio data from telephony system back to the server and perform speech recognition.Developed dynamic voice activity detection algorithm to further improve the user experience.Voice Bot is using MongoDB as database, redis as cache, and ELK as logging system.Developing a key words correction algorithm to reduced 40% character error rate.Further improve the key words detection rate by 28.6% by building a customized ASR system.Developed a gender recognition based in voice and implemented on the voice chatbot system with 98% accuracy.		
Chatbot (Python) <ul style="list-style-type: none">Developed a text data augmentation system which combine several algorithms.Integrated SOTA NLP algorithm BERT to improve chatbot performance.		
E-Commerce Platform (.Net Core) <ul style="list-style-type: none">Developed backend microservice APIs for the platform.Integrated open source BI tool into the platform.Implemented business partner's decrypt algorithms in open source BI tool.		
Customer Service Online Chat (.Net Framework) <ul style="list-style-type: none">Developed a new chatting channel on WeChat.Implemented business partner's decrypt algorithms in the system (Java).		
DevOps <ul style="list-style-type: none">Compile docker-compose yaml configurations for defining and running multi-container e-commerce platform microservices.Compile Kubernetes yaml configurations using Helm for automating deployment, scaling, and management of containerized e-commerce platform microservices.Setting up Jenkins pipelines for automated CI/CD.		

Technical Experience

Projects		
<ul style="list-style-type: none">ShortUrl A highly scalable url shortener service to reduce a long link. Using flask, MongoDB, Redis, and host on DigitalOcean.PhotoRater An ios app written in swift which using Tensorflow to train a photo rating model and transfer to a Tensorflow Lite model and integrated in to the app.Insult Puppy A frontend practice project in which the insult contents come from Evil Insult Generator API and the Puppies images come from RandomDog API. Developed using Vue. Host on Netlify.Game of Life In memory of Dr. John Horton Conway. Developed using Python, SciPy, and OpenCV.freqtrade-gym OpenAi custom gym environment in order to train reinforcement learning agents to profit in crypto markets.Kaggle Competitions:<ul style="list-style-type: none">Google Cloud & YouTube-8M Video Understanding Challenge: Top 15% Bronze Medal.Statoil/C-CORE Iceberg Classifier Challenge: Top 14%.Mercedes-Benz Greener Manufacturing: Top 15%.		

Education

Yunlin, Taiwan R.O.C.	National Yunlin University of Sciences and Technology	Sep 2016 – Aug 2018
<ul style="list-style-type: none">M.S.E. in Computer Science and Information Engineering, Fall 2018. GPA: 4.0Thesis: "Semi-supervised Learning Using Generative Adversarial Networks"		
Taoyuan, Taiwan R.O.C.	Chang Gung College	Sep 2011 – June 2015
<ul style="list-style-type: none">B.S.E. in Computer and Information Science, May 2015.		

Languages and Technologies

<ul style="list-style-type: none">Programming Languages: Python (fluent), C# .NET Core/Framework (proficient), SQL (proficient), JavaScript (proficient), Shell Script (proficient), Swift (prior experience), C/C++ (prior experience), Java (prior experience).Technologies: Git, Docker, Flask, MongoDB, Redis, MySQL, Microsoft SQL Server, Vue, Tensorflow, PyTorch, Kaldi, OpenCV.Cloud Platforms: Google Cloud Platform, Azure, DigitalOcean, Netlify.		
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