Songshan District
Taipei, Taiwan R.O.C.

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Employment

Software Engineer	Telexpress	Sep 2018 – Present

Voice Bot (Python)
- Lead developer for developing a voice chatbot system on PBX telephony system.
- Reduced 40% character error rate by developing a key words correction algorithm.
- 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.
- Developed a voiceprint verification system.
- Improved an open source YouTube videos crawler to construct Mandarin ASR training dataset.

Chatbot (Python)
- Developed a text data augmentation system which combine several algorithms.
- Integrated SOTA NLP algorithm BERT to improve chatbot performance.
- Reviewed industry-academy cooperation projects for the company.

E-Commerce Platform (.Net Core)
- 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)
- Implemented a new chatting channel on WeChat.
- Implemented business parter's decrypt algorithms in the system (Java).

DevOps
- 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.

Education

Yunlin, Taiwan R.O.C.	National Yunlin University of Sciences and Technology	Sep 2016 – Aug 2018

- M.S.E. in Computer Science and Information Engineering, Fall 2018. GPA: 4.0
- Thesis: "Semi-supervised Learning Using Generative Adversarial Networks"

Taoyuan, Taiwan R.O.C.	Chang Gung College	Sep 2011 – June 2015

- B.S.E. in Computer and Information Science, May 2015.

Technical Experience

Projects
- **ShortUrl** A highly scalable url shortener service to reduce a long link. Using flask, MongoDB, Redis, and host on DigitalOcean.
- **Crypto Trading Gym** OpenAi custom gym environment in order to train reinforcement learning agents to profit in crypto markets.
- **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.
- **Access Control System with Face Recognition and RFID** An access control system which check both user RFID number and facial features to gain authorization. This system is currently being used in YunTech Research Center.
- **Kaggle Competitions:**
  - 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%.
  - Quora Question Pairs: Top 18%.

Languages and Technologies

- **Programming Languages:** Python (fluent), C# .NET Core/Framework (proficient), SQL (proficient), JavaScript (proficient), Shell Script(proficient), 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.