U Chun (Jeff) Lao ucllao@gmail.com

Experience

Software Engineer at Center for E-Commerce Infrastructure Development,

University of Hong Kong Hong Kong

November 2016 - now

Upgraded the e-commerce messaging software <u>Hermes</u> to Java 8 and developed the web client Courier for Hermes.

Education

University of Southern California Los Angeles, CA

August 2013 - May 2015

Master of Science in Computer Science with concentration in Intelligent Robotics

Cornell University Ithaca, NY

August 2011 - May 2012

Master of Engineering in Electrical and Computing Engineering

University of California, Berkeley Berkeley, CA

May 2009 - August 2011

Bachelor of Science with double major in

Electrical Engineering and Computer Science, Engineering Physics

Selected Projects

Courier Web Client February 2017 - now

Web client based on the new version of $\underline{\text{Hermes}}$, written in python 3.5 with $\underline{\text{flask}}$ and $\underline{\text{PostgresDB}}$. The client is divided into several microservices and all of them are $\underline{\text{dockerized}}$ and can be deployed with $\underline{\text{ansible}}$.

I co-design the back-end for the client and implement more than half of the code and test of the back-end.

Hermes Business Messaging Gateway

November 2016 - now

Upgrade the open-sourced e-commerce messaging gateway <u>Hermes</u>, built by CECID, HKU back in 2007 for the HK government, from Java 6 to Java 8 and replace outdated dependency packages.

Significant contribution includes updating/ replacing most of the 20+ dependencies and rewrite part of the code affected by the upgrade.

Listsum, the movie and TV series recommender

July 2015 - now

Web-based movie and TV series recommender.

This project uses <u>ReactJS</u> (replacing <u>AngularJS</u> at the beginning,) <u>Express.js</u>(backend) and <u>neo4j</u>, where the recommender is written in C++. It is currently under alpha testing.

Significant contribution includes reducing server response time from seconds to milliseconds.

Directed Research on Natural Language Processing

summer 2014

Directed research at USC under Prof Kenji Sagae on parsing morphologically rich languages (SPMRL Shared Task 2014) with publication.

Focused on exploring the best segmentation in Hebrew and Arabic (dividing raw sentences without white spaces into sequence of meaningful words.) The result segmentation with potentially correct segmentation has an F-score 0.91, compare to the 0.62 for the disambiguated data set provided. Code written in Python.

Skills

Proficiency in: C, C++, Python

Experience with: JAVA, MATLAB, SQL, C#, Pascal, HTML, CSS, Javascript, IATEX

Knowledge in: Go, Docker, ansible, Hadoop Experience working with: AWS, Microsoft Azure

Publication

A. Köhn, U.C. Lao, A. Zadeh and K. Sagae, Parsing Morphologically Rich Languages with (Mostly) Off-The-Shelf Software and Word Vectors. In Proceedings of the 2014 Shared Task of the COLING Workshop on Statistical Parsing of Morphologically Rich Languages. 2014.

Language

Proficient in Chinese and English