MENGYUAN WANG

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EDUCATION

Northeastern University, Boston, MA Sept 2018 - May 2020
Master of Science in Computer Science GPA: 3.9/4.0
Selected Courses: Program Design Paradigm, Algorithms, Machine Learning, Special Topics in Deep Learning

Beijing Information Science & Technology University Sept 2014 - June 2018
Bachelor of Engineering in Computer Science and Technology

TECHNICAL SKILLS

Computer Languages	Java, Python, C/C++, C#, Javascript, HTML5/CSS, SQL, Unix Shell
Tools & Skills	Git, MySql, Android, IntelliJ, Matlab, QT, Latex, Vim, OOD
Platform & Frameworks	Scikit-learn, Tensorflow, Pytorch, AWS EC2, Hadoop

SELECTED PROJECTS

Coherent Lyrics Generation Conditioned on Melody and Artist Jan - April 2019
Project of Special Topics in Deep Learning Course

· Designed and implemented a novel hierarchical model using LSTMs for semantically coherent lyrics generation.
· Conducted an extensive ablation study to evaluate how the model performance is affected by using proposed architecture. Trained numerous variations of the model using GPUs on AWS.

Real-Time MVC Based Stock Virtual Gambling System Mar - April 2019
Project of Program Design Paradigm Course

· Used Java to implement a stock transaction simulation system that supports features like accessing real-time stock data online, Investing with strategy, persistence of users' account, GUI with Swing and design patterns, etc.
· Wrote clear Java documentations, extensive JUnit tests for controllers and models and provided peer code reviews.

Courseworks of Special Topics in Deep Learning Course Feb - Mar 2019

· Implemented Sketch generation with GAN using LSTM as generator and discriminator. Improved model with bi-directional LSTMs, Wasserstein GAN and used pre-trained generator to warm-start the model.
· Used Pytorch to implemented a poem generation program with an attention based Seq2Seq model.

Google Analytics Customer Revenue Prediction Nov - Dec 2018
Kaggle Competition, Final Project of Machine Learning Course

· Wrote Python scripts to analyze data features and implemented feature engineering and preprocessing.
· Implemented Ensembled method of XGBoost, Light GBM and CatBoost to improve result and ranked Top 15%.

Energy and Performance Aware Task Scheduling in Mobile Cloud Computing Nov 2018
Final Project of Fundamentals of Computer Engineering

· Used C++ to implement modified HEFT algorithm to generate the minimal-delay scheduling as baseline and subsequently optimized energy consumption by migrating tasks among the local cores and the cloud.

Human-Computer Checkers Game Development Mar - May 2017
Project of Unite All Cup Computer Game Competition

· Used C++ to implemented an interactive checkers game program with QT framework for the interface. Used Alpha-Beta as search engine and optimized context evaluation function weightings through Q-learning algorithms.

Canteen Information Acquisition Embedded System with Time Series Analysis Nov - Dec 2016
Project of Undergraduate Innovation and Entrepreneurship Program

· Wrote a Python program on Raspberry Pi for retrieval and upload of sensors data to Yeelink IOT platform.
· Built an Android client to obtain data from network, make statistics and visualize analysis results to users.
· Co-implemented flow rate prediction using a neural network to analyze time-series data from sensors.

Client/Server Based Online Air Ticket Booking System Oct - Dec 2016
Final Project of Software Engineering Course

· Designed and Implemented an air ticket system based on C/S model. Created a relational database in MySql.
· Used Javascript, HTML5, and CSS for front-end development. Implemented the booking and management functions for users and server with Struts2, Hibernate and Spring frameworks under MVC pattern.

EXPERIENCE

Natural Language Processing Lab, Tsinghua University, Beijing Dec 2016 - June 2017
Research Assistant

· Contributed and maintained topics of THU Open Chinese Lexicon(THUOCL), which received 100+ stars on github: developed a web crawler to collect doamin-specific data and achieve data preprocessing.
· LegalAI Project: contributed to event extraction: used CRF model to implement sequence labeling with extending domain-specific datasets iteratively for legal instruments of different types.

PUBLICATION

Mengyuan Wang, Chuqiao Chen, Jiamin Wu, Dan Wang. Research on Information Collection System of Canteen Based on Internet of Things, Premiere, 2016, (11).