TANG Xuxin

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EDUCATION BACKGROUND

Wuhan University 09/2015 – 06/2018
M.S. in Software Engineering(Graphic Communication Engineering); Average score: 83.2/100
Core coursework: Matrix Theory | Numerical Analysis | Logic in Computer Science | Mathematical Model and Optimization (90) | Computer Science Research Methodology (90) | Color Vision Analysis | Advanced Multi-media Technology (90)

Wuhan University 09/2011 – 06/2015
B.E. in Printing Engineering; Average score: 82.9/100 Ranking: top 20%
Core coursework: Advanced Mathematics | Linear Agerbra | Mechanical Drawing | Probability Theory and Statistics | Object-Oriented Programming | Information Theory | Communication Principle | Computer Graphics | Digital Image Processing | Color Management | Three Dimesional Animation Design | Web-page Design | Digital Medital Technology | Data Structure | Chromatology | The Technique of Photography | Database Principle and Application | Machinery Principle | English Lexicology | English General Linguistics

Self-Learning: Machine Learning | Deep learning | Convolutional Neural Networks for Visual Recognition | General Phychology

PUBLICATIONS

- Zhang F*, **Tang X***, Li X, et al. Quantifying cloud elasticity with container-based autoscaling[J]. *Future Generation Computer Systems,* 2019, 98: 672-681. (*Co First Author, 40% newly added content)
- **Tang, Xuxin**, et al. "Quantifying Cloud Elasticity with Container-Based Autoscaling." *2017 IEEE 15th Intl Conf on Dependable, Autonomic and Secure Computing, 15th Intl Conf on Pervasive Intelligence and Computing, 3rd Intl Conf on Big Data Intelligence and Computing and Cyber Science and Technology Congress (DASC/PiCom/DataCom/CyberSciTech). IEEE*, 2017. (Selected for submission as an extended version)
- **Tang, Xuxin**, Zhijiang Li, Yuhang Chen. "A Night Image Enhancement Algorithm Based on Guided Filtering." *China Academic Conference on Printing & Packaging and Media Technology*. Springer, Singapore, 2016.

RESEARCH & PROJECT EXPERIENCES

The Practice of Cloud Platform Container Auto-scaling based on Elasticity Measurement 12/2015 – 05/2017
Proposed a framework with container auto-scaler and defined elasticity mathematically to quantify the cloud elasticity, Team Leader, supervised by Prof. Fan Zhang, Wuhan University

- Proposed a framework with container auto-scaler, which monitors the resource usage of the containers and the associated scales in or scales out containers in need
- Defined a measurable cloud elasticity by providing executable analysis on the elastic performance of container-based autoscaling
- The first work to quantify the cloud elasticity with container-baised auto-scaling and it has been accepted as a full IEEE research paper and invited to be extended in a SCI journal with the total citation of 18 so far

A Night Image Enhancement Algorithm Based on Guided Filtering 05/2015 – 10/2015
Developed a fast and highly efficient method for nigh image enhancement based on Guided Filtering, Team Leader, supervised by Prof. Zhijiang Li, Wuhan University

- Developed an extremely fast processing image method based on guilded flitering in order to make the original blurred and noisy nigh image clear and more suitable for human eys to observe
- Details are clearly presented and noises are successfully obliterated through processing the night image's two layers independently which are separated in the HVS color space
- Guided filtering is used for the night image enhancement for the first time and a paper was published on the basis of the finding

Ali Tianchi Intelligent Traffic Forecast Challenge 05/2017 – 08/2017
Developed a time sequence model in Python to analyze and predict the future traffic situation, Team Leader, top 3% out of 1716 teams

- Developed a time sequence model in order to estimated the average travel time from 7 AM to 8 AM based on the history of the daily travel time of each vehicle on 132 roads from March to May

- Leveraged LSTM for prediction and parameter fine-tuning such as encoder and decoder layer, hidden units, batch size and dropout

Jigsaw Unintended Bias in Toxicity Classification (Kaggle) 05/2019 – 06/2019

Developed an NLP model for identifying toxicity in online conversations, Team Leader, Top 10% out of 3030 teams in Kaggle NLP competition, bronze medal

- Cleaned and regularized the data for model construction by using the deep model BERT and LSTM for a jointly learning and prediction
- Learned the preprocessing of natural language in the course of the competition, learned *word2vec*, *glove*， and used embeddings to understand the principles of attention and transformer, memory
- Used pytorch to train the model with two-layer BI-LSTM, and BERT to train the pre-trained model and predict the test dataset

WORKING/INTERNSHIP EXPERIENCE

Recommendation Algorithm Engineer, **YY Business Unit, Baidu** 07/2019 – 03/2021

- Responsible for data analysis and modeling and high-quality matching recommendation services
- Assist and independently complete various machine learning/deep learning algorithms
- Responsible for the construction of the company's data analysis and data mining business analysis system, design of overall system architecture, planning and giving full play to the value of data, improving data quality, and promoting better development of the company's business
- Establish business data analysis model to guide the in-depth mining and effective use of billion-level data, fully realize the commercial value of data and building one of the core competitiveness of the company

Software Development Engineer, **Oracle China R & D Center** 07/2018 – 05/2019

- Provided cloud computing customers with visual analytics solutions of integrated monitoring and management
- Obtained a good knowledge of *jQuery*, *JavaScript*, *OracleJET*, *requireJS*, *Knockout* and other Oracle front-end development framework, as well as understood the Oracle agile development process
- Solved cross-platform problems that have existed in the product for a long time and optimized running efficiency
- Provided front-end technical support for new projects, involving *puppeteer*, *node.js*, *ApiGateway*, *Rest API*, and supported foreign colleagues to complete their work
- Wrote automated test code for the front-end components and test cases for the backend

EXTRACURRICULAR EXPERIENCE

Minister, Volunteer Member Department, Wuhan University 03/2012-03/2013

- Organized charity activities including not only charity sales, family education programs for deaf-mute children and aid education in Enshi Village in summer
- Obtained the honor of "Outstanding Student Leaders" due to my good performance

Member, Art Association, Wuhan University 09/2011-09/2012

- Hold a large-scale outdoor theme show with Wuhan as the theme, contacted artists, decorated the event site
- Exercised the ability to communicate with strangers, increasing courage and personal creativity

HONORS & AWARDS

- Full Scholarship for Graduate students of Wuhan University, three times 2015 – 2017
- Graduate Scholarship of Wuhan University, two times 2015 – 2017
- Outstanding Student of Wuhan University, two times 2013 – 2015
- 2nd Prize in the "Internet+" Thesis Competition of Wuhan University 2016
- Outstanding Student Leaders of Wuhan University 2013
- 1st Prize of Summer Social Practice of Wuhan University 2012

SKILLS & HOBBIES

Languages: C | C++ | Java | Python | MATLAB | HTML | JavaScript | SQL | Hive SQL | Spark
Libraries: jQuery | Bootstrap | TensorFlow | Keras | Numpy | Matplotlib | Pandas | Pupeteer
Tools: Node.js | Flask | requireJS | Knockout | ApiGateway | Rest API
Hobbies: Calligraphy | Singing | Dancing