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| **Zhang He** |

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| **Objective: Software Engineer(Machine Learning/Backend/App)** |

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| (+65) 9057-5948 |

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| <http://www.cnblogs.com/CheeseZH/> |

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| **EDUCATION BACKGROUND** |

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| **National University of Singapore (**Director**: Prof Chua Tat Seng)** | 2015.04 - PRESENT |

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| Junior Research Assistant in NExT Research Centre |

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| **Wuhan University of Science and Technology** | 2013.09 - 2016.06 |

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| Master of Computer Science and Technology |

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| **Wuhan University of Science and Technology** | 2009.09 - 2013.06 |

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| Bachelor of Software Engineering |

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| **R&D EXPERIENCE** |

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| **Topic Categorization and Representation of Health Community Generated Data** | 2015.04 – 2015.10 |

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| Junior Research Assistant @ NExT Search Center, National University of Singapore |

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| ***•*** | Address the categorization and representation problems in community-based health services |

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| |  |  | | --- | --- | | ***•*** | Study on professional health provider released data |  |  |  | | --- | --- | | ***•*** | Evaluate Naïve Bayes, KNN, Decision Tree and SVM on health data categorization |  |  |  | | --- | --- | | ***•*** | Evaluate Term-based, Domain Specific and LDA-based methods on health data representation | |

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| **“iBeautyGuru” Hybrid App** | 2015.04 - 2015.09 |

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| Full Stack Engineer @Singapore iBeautyGuru Pte., Ltd. |

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| |  |  | | --- | --- | | ***•*** | Maintain database in the app with MySQL | | ***•*** | Develop system APIs on the basis of Yii2.0 framework(PHP) | | ***•*** | Develop hybrid application on the basis of Ionic (HTML5/CSS3/AngularJS/Cordova) | | ***•*** | Analyze the reason of load slowly in app homepage, and compress images in the system with Imagick extension in PHP, save 90% storage space and increase the speed of loading | |

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| |  |  | | --- | --- | | **Crawler For Multi-media data and Data Preprocessing** | 2015.04 – PRESENT |  |  | | --- | | Junior Research Assistant(Python) @ NExT Search Center, National University of Singapore |  |  |  | | --- | --- | | ***•*** | Develop web crawlers in Python for Image Data on Flickr, Text Data on NLPjob and Video Data on Youtube |  |  |  | | --- | --- | | ***•*** | Develop an extraction and statistic tool in Python for job titles information in LinkedIn text data | | ***•*** | Develop a tool in Python to import data from thousands of excel files to MySQL database automatically |  |  |  | | --- | --- | | **Research on the correlation of text and images on Sina Microblog data** | 2015.01 - 2015.08 |  |  | | --- | | Research Engineer(Python) @Wuhan University of Science and Technology |  |  |  | | --- | --- | | ***•*** | Pre-treat microblog corpus using Python with LTP-cloud(released by Harbin Institute of Technology) |  |  |  | | --- | --- | | ***•*** | Extract the sematic and statistical features from the microblog corpus | | ***•*** | Develop a pLSA model in Python for the topic modeling of the microblog corpus | | ***•*** | Keyword Extraction: <https://github.com/cheesezhe/SinaBlogTextMining> | | ***•*** | pLSA topic model: <https://github.com/cheesezhe/pLSA_Topic_Model> |  |  |  | | --- | --- | | **Atomic Event Extraction Based on the Hybrid HMMs** | 2014.06 - 2015.01 |  |  | | --- | | Research Engineer(Python) @Wuhan University of Science and Technology |  |  |  | | --- | --- | | ***•*** | Pre-treat NTCIR-9 corpus using Python with LTP-cloud |  |  |  | | --- | --- | | ***•*** | Develop a HMM model in Python | | ***•*** | Design and develop a Hybrid HMMs(a 2nd-Order and 2-D HMM with K-means) in Python | | ***•*** | Hybrid HMMs: <https://github.com/cheesezhe/Hybrid-HMM> |  |  |  | | --- | --- | | **Atomic Event Extraction Based on Information Unit Fusion** | 2013.09 - 2014.06 |  |  | | --- | | Research Engineer(Java) @Wuhan University of Science and Technology |  |  |  | | --- | --- | | ***•*** | Pre-treat the news corpus in Java with Stanford NLP Tools |  |  |  | | --- | --- | | ***•*** | Design and develop an Information Unit Fusion Model |  |  |  | | --- | --- | | **The Application Method of Dendritic Cell Algorithm in Outlier Detection** | 2011.12 - 2012.12 |  |  | | --- | | Research Engineer(C) @Wuhan University of Science and Technology |  |  |  | | --- | --- | | ***•*** | Analyze the random-based parameters in dendritic cell algorithm |  |  |  | | --- | --- | | ***•*** | Design and develop the Result Controllable Dendritic Cell Algorithm in C | |

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| **RESEARCH ACHIEVEMENTS** |

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| *•* | Maofu Liu, He Zhang, Huijun Hu et al. Topic Categorization and Representation of Health Community Generated Data [J]. Multimedia Tools and Applications. [SCI] | 2015 |

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| *•* | Yikai Gao, Xiangdong Luo, He Zhang. News atomic events temporal relation recognition based on function word and predicate co-occurrence[C].ICMTMA 2015 [EI&ISTP] | 2015 |

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| *•* | He Zhang, Maofu Liu, Huijun Hu, Jinguang Gu. Atomic Event Extraction Based On Information Unit Fusion[J]. Journal of Wuhan University(Natural Science Edition), 2015102：139-144 | 2014 |
| *•* | Yuan, Song, and He Zhang. Result-Controllable Dendritic Cell Algorithm[C]. Intelligent Computing Theory: 10th International Conference, ICIC 2014. [EI&ISTP] | 2014 |
| *•* | Patent: Information Unit Fusion-Based Atomic Event Extraction For News (Accepted) | 2014 |
| *•* | Software Copyright: Chunking Recognition-Based News Atomic Event Extraction System(Authorized) | 2014 |
| *•* | He Zhang, Song Yuan. 结果可控树突状细胞算法[J]. Computer Application and Software, 2013,01:59 -62+74 | 2013 |
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| **PROFESSIONAL SKILLS** |

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| ***•*** | Experience in Python, C/C++, PHP, Linux, MySQL, Git, Apache Server, NLP tools kit(Stanford NLP Tools, LTP-cloud, NLPIR), AngularJS, Ionic, Yii2.0, HTML/CSS/JavaScript |

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| ***•*** | Familiarity with Hadoop, Redis, NLP (POS, NER, Parser, SRL), ML (HMM, BPNNs, pLSA, LR, K-NN, N-Gram, Naïve-Bayesian, Decision Tree, SVM), Recommendation Algorithm(Item-Based CF, User-Based CF) |

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| **CERTIFICATES & AWARDS** |

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| ***•*** | Software Designer Certificate (CVEQC, China Vocational Education Qualification Certification) | 2012 |
| ***•*** | College English Test Level 6 | 2012 |
| ***•*** | Database System Engineer Certificate (CVEQC) | 2011 |
| ***•*** | College English Test Level 4 | 2010 |
| ***•*** | Be recommended for admission to Wuhan University of Science and Technology to be a postgraduate | 2013 |
| ***•*** | 6th ITAT C Programming Contest, National first prize | 2012 |
| ***•*** | WUST 1st ACM Programming Contest, University Second prize | 2012 |
| ***•*** | Entered the semi-finals of “Baidu Star” Programming contest | 2012 |
| ***•*** | Undergraduate stage, obtained university scholarship every year and a National Scholarship | 2010-2013 |
| ***•*** | Undergraduate stage, obtained “Outstanding Student” title 2 times and “Outstanding Graduate” title | 2010-2013 |