Hongyang Yu

EDUCATION

EXPERIENCE

• Rutgers University

Master of Science in Computer Science Specialized in AI and Machine Learning

• Shandong University

Bachelor of Engineering in Computer Science and Technology

New Brunswick, NJ Graduation: 05/2017

GPA: 3.45/4.0

Jinan, Shandong, China GPA: 87/100 Graduation: 06/2015

07/2017 – now

• Altomni Corp. – Software Developer

Working on a Applicant Tracking System (ATS) in back-end team at an early-stage startup

- Designing and developing RESTful API and service with Spring
- Developing and optimizing job description parser and resume parser with Flask
- Designing and optimizing structure of relational database, and crawling and populating data
- Collaborating with front-end engineers to design the system
- Developing integration tests using Rest Assured
- Related Technologies: Java, Spring, Jhipster, Python, Flask, MySQL, AWS, Alibaba Cloud, Javascript
- Shandong University, Machine Learning and Data Mining Lab Research Assistant 03/2014 01/2015
 - Research topic: Finger-knuckle-print Pattern Recognition
 - > Came up with two phase ROI detection method. Then other researchers can do identification using the ROI images extracted by this method. Published the paper above as the lead author.
 - Related Technologies: Matlab, SIFT, SURF, Nearest Neighbor Search, Biometric Recognition
- Peking University, Software Engineering Institute Research Assistant Intern

07/2013

- Participated in the analysis and design of problem detection system by mining patterns of console logs
- Related Technologies: Java, SQL, Text Mining, Principal Components Analysis
- Publication: A New Finger-Knuckle-Print ROI Extraction Method Based on Two-Stage Center Point
 Detection. Yu, Hongyang, Yang, G., Wang, Z. and Zhang, L. (EI included)
 03/2015

PROJECTS

• Restaurant Strategy Selection based on Yelp with Spark

Feb 2017 - Apr 2017

- > Task: Find which kind of restaurant strategy has more possibility to get success when startup
- Extracted and transformed text features to numeric vectors from over 144,000 businesses on Spark
- > Trained Multilayer backpropagation neural network to do regression on Deeplearning4j
- Related Technologies: Scala, Java, Spark, Deeplearning4j, Word2Vect, openNLP
- Chess Game Data Processing on AWS EC2 Hadoop

Nov 2016 - Dec 2016

- > Task: Process large chess game data to analyze of winning percentage on AWS
- ➤ Implemented Mapper, Reducer and Combiner, and customized FileInputFormat and Partitioner to select and sort matching information. Ran MapReduce jobs with 20 GB PGN type data on the AWS
- Related Technology: Java, MapReduce, Hadoop, AWS
- Hand-Eye Robotics Grasping Prediction with Deep Learning

Mar 2016 – May 2016

- > Task: Predict the best grasping pose of a robotic hand for objects with RGB-D images of scenes
- Designed scoring function and collected large roboticss grasping data
- > Trained Convolutional Neural Network (CNN) to predict the best grasping pose
- > Collected more than 30,000 grasp attemps with different scenes to train CNN prediction model
- > Related Technologies: Python, ROS, Point Cloud, Keras, TensorFlow, Scikit-learn

TECHNICAL SKILLS

- Programming Languages: Java, Python, Scala, C/C++, Matlab, Swift, Objective-C, SQL
- Web Technologies: JavaScript/HTML/CSS, PHP, Scrapy, Meteor JS
- Frameworks and Tools: Spring, Flask, AWS, Spark, Hadoop, CUDA, MySQL, MongoDB, Maven, Git