FEI TAO

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EXPERIENCE

Research Assistant, Multimedia Image Processing Lab, Rutgers Sept 2017 - present

• Work on data analysis, data mining in healthcare data by using machine learning algorithms such as clustering and classification.

• Do significance tests and calculate similarity patient attributes, learn feature weights on case-based feedbacks by Brute Force and Greedy Search method, and optimize them by EM.

R & D Intern, Aike Electronics Co.Ltd, Hebei, China June 2015 – Sept 2015

• Maintain and develop the detecting system which checks the imperfection of electronic components.

TECHNICAL SKILLS

Languages: JAVA, C++, Python, MySQL, JavaScript
Tools: Matlab, Jupyter Notebook, Eclipse, AWS, Spark

EDUCATION

Rutgers – New Brunswick, NJ Sept 2016 - June 2018

• M.S.: School of Engineering, Electrical and Computer Engineering, GPA: 3.4/4

Xiamen University, Xiamen, China Sept 2012 - June 2016

• B.S.: School of Information Science & Technology, Electrical Engineering, GPA: 83/100

PROJECTS

(Python) Modeling Human Affective Behavior by Deep Learning Oct 2017 - present

• Implemented neural networks to predict facial expressions from speeches.

• Used Generative Adversarial Networks(GAN) to map a speech-to-face translation.

(Python) NLP with the 20-newsgroup Dataset Sept 2017 - Oct 2017

• Did data cleaning and text preprocessing such as removing tags by BeautifulSoup, using regular expressions, tokenizing, removing stop words and stemming.

• Created features using Bags of Words and implemented Random Forest model.

(C++) Digits Classification and Face Detection Apr 2017 - May 2017

• Designed the Naive Bayes Classifier, Perceptron and MIRA to detect digit and face images.

• Enhanced feature extraction by detecting circles in a digit image using a circular linked list and the accuracy was increased from 87% to 92%.

(C++) Fast Trajectory Replanning for AI Computer Games Feb 2017

• Coded A* and extend to incremental versions, forward and backward Adaptive A* by updating the heuristics between searches to find solutions for a randomly generated maze.

• Implemented the binary heap by own C++ codes to build an open list.

RELATED COURSES

• Data Structures and Algorithms • Artificial Intelligence • Data Mining
• Stochastic Signals Processing • Pattern Recognition • Convex Optimization