Haidong Wang

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EDUCATION

University of South Dakota, Vermillion, SD
M.S. Computer Science.
Jan 2018 - Dec 2019 (only thesis left)
GPA 4.0/4.0

- Thesis title: One Shot Learning for face recognition using image embedding
- Advisor: Dr. KC Santosh

University of South Dakota, Vermillion, SD
Sep 2013 - Dec 2017
B.S. Computer Science.

RESEARCH INTEREST

Computer Vision, Machine Learning, Deep Learning
Face recognition, Object Detection, Medical Imaging

RESEARCH EXPERIENCE

University of South Dakota, Vermillion, SD
Graduate Research Assistant
Jan 2018–May 2019

- Constructed and researched Spatial Features (Shape Context, Pyramid Histogram of Oriented Gradients, Spatial Envelope) in grayscale image of face recognition, and applied Spatial Feature to Extreme Learning machine and compared with SVM, RF, DT, LDA, etc.
- Constructed and trained a face recognition ResNet CNN model for face data collected in campus. [link] And extracted face feature from the CNN Model and compared with Spatial Features with a variety of machine learning techniques.
- Develop a faster R-CNN model to detect circle like foreign object in chest x-ray.

TEACHING EXPERIENCE

University of South Dakota, Vermillion, SD
Teaching Assistant, Robotic Programming
Jan 2019–May 2019

- Taught weekly lab course for 30 junior and senior level undergraduate students and graduate students.
- Developed interactive course material to understand basic robotic algorithms and hardware design.
- Created and graded course assessments.

GRANT

- FY2019 Graduate Research and Creative Scholarship Grant.
  Sep 2018–Apr 2019
  Project name: Real-time Face Re-identification in Large time-series Data.

PUBLICATION

- **H Wang**, Md Hussain, KC Santosh, et al. An empirical study of ELM on face matching.
  Communications in computer and information sciences (CCIS), Springer (selected, recent trends in image processing &pattern recognition), 2018

- MF Hussain, **H Wang,** KC Santosh. Gray level face recognition using spatial features.
  Communications in computer and information sciences (CCIS), Springer (selected, recent trends in image processing &pattern recognition), 2018

CONFERENCE PRESENTATIONS

Oral Presentation

- **H Wang,** (2019, April). Real-time Face Re-identification in Large Data.
  Oral session presented at University of South Dakota Idea Fest, Vermillion, SD.

Poster Presentation

- M Dhar, **H Wang**, KC Santosh. (2019 May) Deep Imaging for Foreign Object Detection in Chest Radiograph.
  Poster session presented at Mayo Clinic Artificial Intelligence Symposium, Rochester, MN.
- **H Wang,** KC Santosh. (2019, May). Deep features for human face re-identification.
  Poster session presented at the 2nd Midwest Statistical Machine Learning Colloquium, Iowa State University, Ames, IA.
- **H Wang,** KC Santosh. (2019, Feb). Face re-identification in real-time large time series data.
  Poster session presented at 2019 South Dakota State University Data Science Symposium, Brookings, SD.

SKILLS

- Programming Language: Python (3 years), Java, C/C++, MATLAB, C#
- Operating System: Linux, Windows, Mac OS
- Computer vision library: OpenCV
- Deep Learning: Pytorch