

ECE 313 Final Project Report

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Task 0:

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1  clear all;
   clc;
3
   load 1_a41178.mat;
5  patient1_data = floor(all_data);
   patient1_labels = all_labels;
7  training1 = patient1_data(:,1:(2*length(patient1_data)/3));
   testing1 = patient1_data(:,(2*length(patient1_data)/3):length(
   patient1_data));
9  label_training1 = patient1_labels(1:(2*length(patient1_labels)
   /3));
   label_testing1 = patient1_labels((2*length(patient1_labels)/3):
   length(patient1_labels));
11
   load 2_a42126.mat;
13 patient2_data = floor(all_data);
   patient2_labels = all_labels;
15 training2 = patient2_data(:,1:floor(2*length(patient2_data)/3))
   ;
   testing2 = patient2_data(:,floor(2*length(patient2_data)/3):
   length(patient2_data));
17 label_training2 = patient2_labels(1:floor(2*length(
   patient2_labels)/3));
   label_testing2 = patient2_labels(floor(2*length(patient2_labels)
   )/3):length(patient2_labels));
19
   load 3_a40076.mat;
21 patient3_data = floor(all_data);
   patient3_labels = all_labels;
23 training3 = patient3_data(:,1:(2*length(patient3_data)/3));
   testing3 = patient3_data(:,(2*length(patient3_data)/3):length(
   patient3_data));
25 label_training3 = patient3_labels(1:(2*length(patient3_labels)
   /3));
   label_testing3 = patient3_labels((2*length(patient3_labels)/3):
   length(patient3_labels));
27
   load 4_a40050.mat;
29 patient4_data = floor(all_data);
   patient4_labels = all_labels;
31 training4 = patient4_data(:,1:floor(2*length(patient4_data)/3))
   ;
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testing4 = patient4_data(:, floor(2*length(patient4_data)/3):
length(patient4_data));
33 label_training4 = patient4_labels(1: floor(2*length(
patient4_labels)/3));
label_testing4 = patient4_labels( floor(2*length(patient4_labels
)/3): length(patient4_labels));
35
load 5_a41287.mat;
37 patient5_data = floor(all_data);
patient5_labels = all_labels;
39 training5 = patient5_data(:, 1:(2*length(patient5_data)/3));
testing5 = patient5_data(:, (2*length(patient5_data)/3): length(
patient5_data));
41 label_training5 = patient5_labels(1:(2*length(patient5_labels)
/3));
label_testing5 = patient5_labels((2*length(patient5_labels)/3):
length(patient5_labels));
43
load 6_a41846.mat;
45 patient6_data = floor(all_data);
patient6_labels = all_labels;
47 training6 = patient6_data(:, 1: floor(2*length(patient6_data)/3))
;
testing6 = patient6_data(:, floor(2*length(patient6_data)/3):
length(patient6_data));
49 label_training6 = patient6_labels(1: floor(2*length(
patient6_labels)/3));
label_testing6 = patient6_labels( floor(2*length(patient6_labels
)/3): length(patient6_labels));
51
load 7_a41846.mat;
53 patient7_data = floor(all_data);
patient7_labels = all_labels;
55 training7 = patient7_data(:, 1: floor(2*length(patient7_data)/3))
;
testing7 = patient7_data(:, floor(2*length(patient7_data)/3):
length(patient7_data));
57 label_training7 = patient7_labels(1: floor(2*length(
patient7_labels)/3));
label_testing7 = patient7_labels( floor(2*length(patient7_labels
)/3): length(patient7_labels));
59
load 8_a42008.mat;
61 patient8_data = floor(all_data);
patient8_labels = all_labels;
63 training8 = patient8_data(:, 1:(2*length(patient8_data)/3));
testing8 = patient8_data(:, (2*length(patient8_data)/3): length(
patient8_data));
65 label_training8 = patient8_labels(1:(2*length(patient8_labels)
/3));
label_testing8 = patient8_labels((2*length(patient8_labels)/3):
length(patient8_labels));
67
load 9_a41846.mat;
69 patient9_data = floor(all_data);
patient9_labels = all_labels;
71 training9 = patient9_data(:, 1: floor(2*length(patient9_data)/3))

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73      ;
      testing9 = patient9_data(:, floor(2*length(patient9_data)/3):
      length(patient9_data));
      label_training9 = patient9_labels(1: floor(2*length(
      patient9_labels)/3));
      label_testing9 = patient9_labels(floor(2*length(patient9_labels)
      )/3):length(patient9_labels));

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For task 0 we took the raw patient and gold data and partitioned it into testing and training segments.