


Mood in Wellmo data

Red Chair Society

Wellmo data

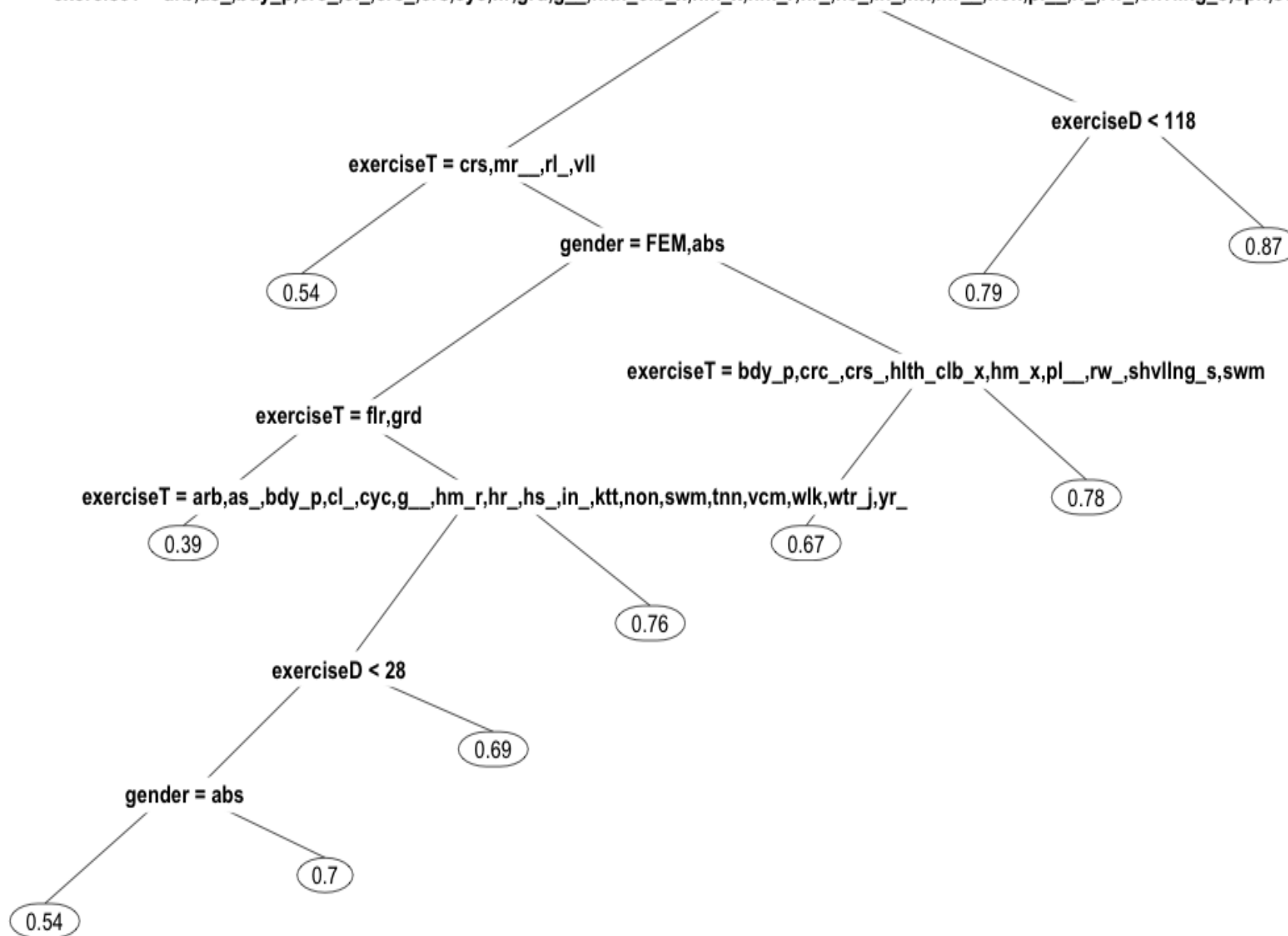
- **Goal** → interesting insights and new applications
- **Data** → exercise and activity information (walking, cycling,...), physical and emotional measurements (weight, mood, ...)
- We attempted to predict the mood depending on:
 - whether a person exercised during previous hour,
 - exercise type,
 - exercise duration,
 - and gender.

Classification tree

- Good model, can model non-linear relationships
 - Not prone for overfitting
 - Easy to interpret
 - Turned out to be better than logistic regression
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- Exercise type/absence of one
 - Exercise duration
 - Gender
- 
- Mood

Mood, classification tree

exerciseT = arb,as_bdy_p,crc_cl_crs_crs,cyc,flr,grd,g_hlth_clb_x,hm_x,hm_r,hr_hs_in_ktt,mr_,non,pl_,rl_rw_shvllng_s,spn,swm,tnn,vcm,vll,wlk,wtr_j,yr_



Mood transition matrix

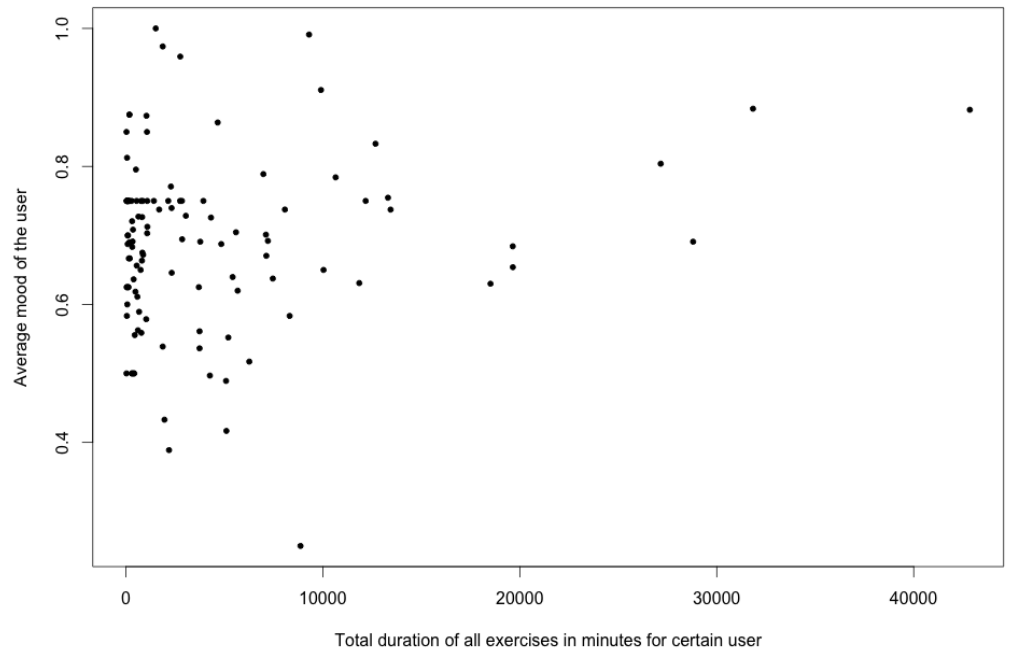
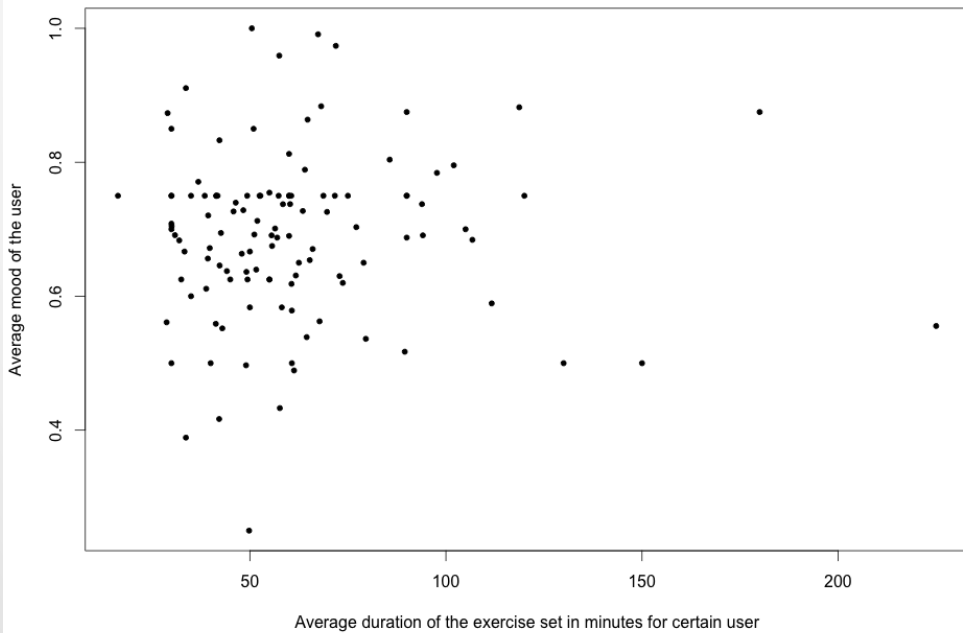
		Predictions				
		0.25	0.5	0.75	1	
Y – actual mood X – predicted mood	0	1	7	106	0	
	0.25	3	25	560	0	
	0.5	1	88	2189	4	
	0.75	2	90	4660	58	
	1	0	18	1911	69	

Achieved accuracy was 49.22%

Average mood

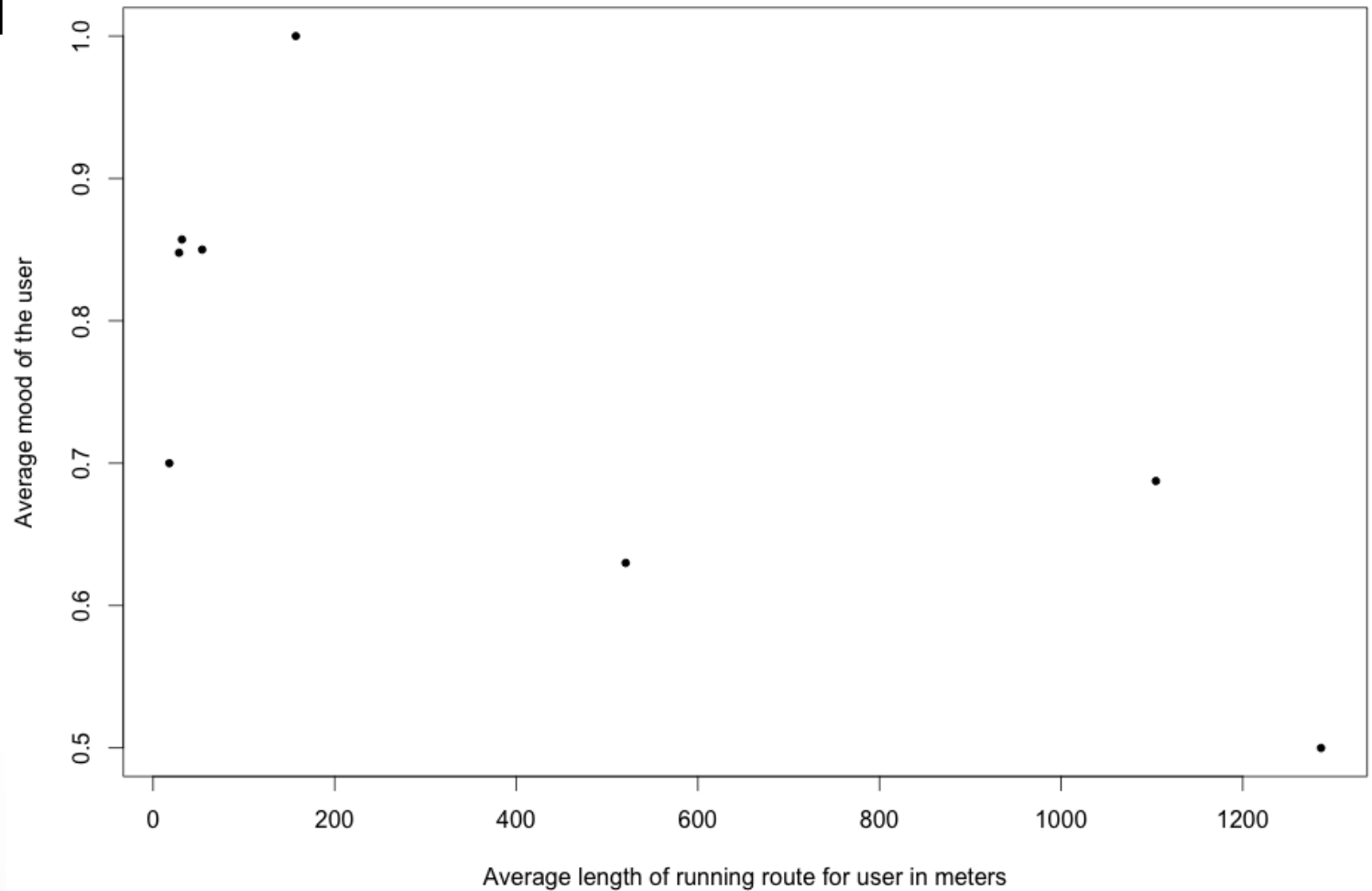
Related to the average exercise duration

Related to total exercising volume



Mood and running length

Average mood related to the length of running exercises



So what?

- ✓ Predicting current state of a person (mood, stress, energy level)
- ✓ Recommend best-suited activities
- ✓ Applications
 - Get recommendations like “Have a walk, increase your energy by 30%”
 - Send your coworker useful notifications
 - Ask the app: “Is running at 10pm good for me?”